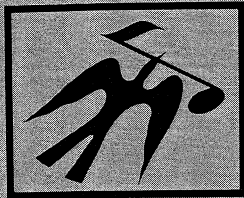


SERVICE MANUAL



FISHER

MC-720

**AUDIO COMPONENT
SYSTEM**
(EUROPE)



The first name in high fidelity

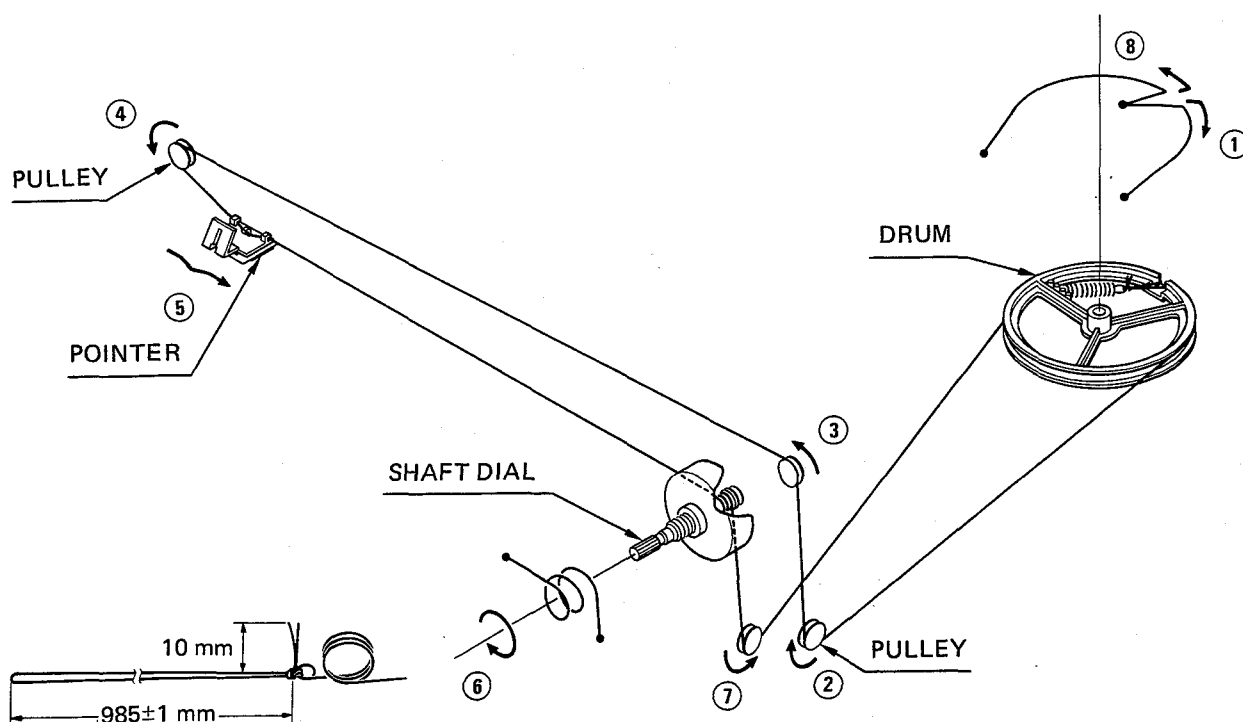
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NOTES:

Schematic Diagram (2) and Point to Point Wiring Diagram are separately attached to this manual.

DIAL CORD STRINGING



NOTE: Check to see that the dial cord is correctly strung by turning the dial.

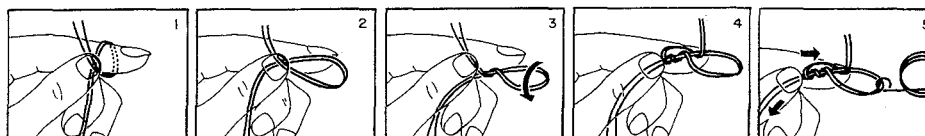
SPECIFICATIONS

AUDIO COMPONENT SYSTEM MC-720	
AMPLIFIER SECTION Minimum RMS sine wave power per channel at 8 ohms within rated bandwidth at no more than rated T.H.D.	15 Watts
Power Bandwidth	100 Hz — 15 kHz
Total Harmonic Distortion	1.0 %
FM TUNER SECTION	
Usable Sensitivity	2.5 μ V
Alt. Channel Selectivity	40 dB
Signal-to-Noise Ratio	65 dB
Stereo Separation at 1 kHz	30 dB
AM TUNER SECTION	
Usable Sensitivity	300 μ V/m
Selectivity	30 dB
Signal-to-Noise Ratio	45 dB
Image Frequency Rejection	40 dB
CASSETTE TAPE DECK SECTION	
Wow & Flutter (WRMS)	0.08 %
Signal-to-Noise Ratio	45 dB
Channel Separation	36 dB
Frequency Response (Fe ₂ O ₃)	80 Hz — 10 kHz
Harmonic Distortion (Fe ₂ O ₃)	2 %
Erase Ratio	60 dB
TURNTABLE SECTION	
Wow & Flutter (WRMS)	0.4 %
Signal-to-Noise Ratio (DIN)	45 dB
Tracking Force Range	3.2±0.8 g
GENERAL SECTION	
Power Requirements	110/220 V AC 50 Hz
Power Consumption	98 W
Dimensions (W x H x D)	404 x 210 x 400 mm
Weight (approximate)	8.3 kg

*Dolby is a registered trademark of Dolby Laboratories.

* Because its products are subject to continuous improvement, Fisher Corporation reserves the right to modify product designs and specifications without notice and without incurring any obligation.

CORD KNOTTING



DISASSEMBLY INSTRUCTIONS

A. REMOVAL OF PLAYER (CHANGER)

1. Cover Decorate (A) located on the back of Cabinet and prize Changer Clamper through the hole. (Fig. 1)
2. Lift the rear of Changer and disconnect the two plugs with the shield wires and the connector of the supply cord for the motor.
3. Remove Changer from Cabinet by pulling it backward.

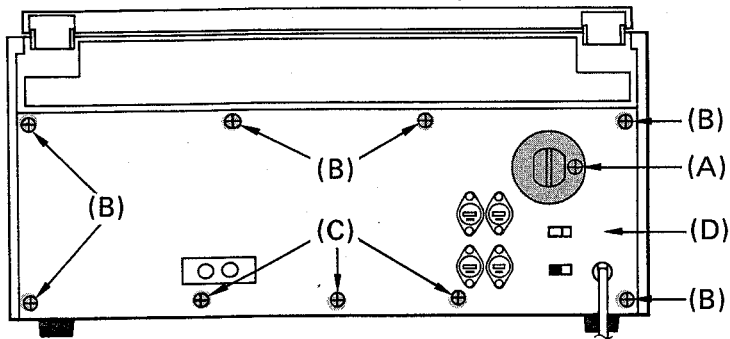


Fig. 1

B. REMOVAL OF CABINET

1. Remove the screws (B and C) and pull out Cabinet Rear Panel (D) from Cabinet. (Fig. 1)
2. Remove the screws (E) fastening Cabinet Bottom Plate (F). (Fig. 2)

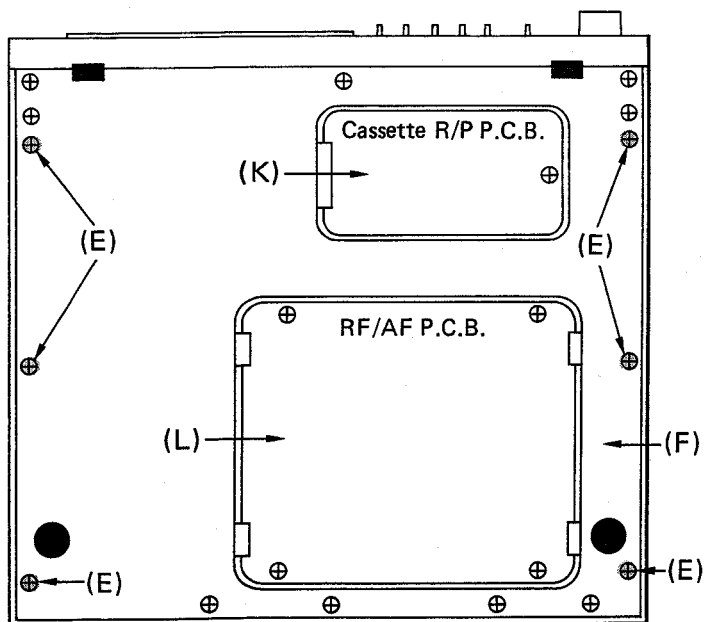


Fig. 2

3. Remove the screws (G) fastening the left side of Cabinet (H). (Fig. 3)

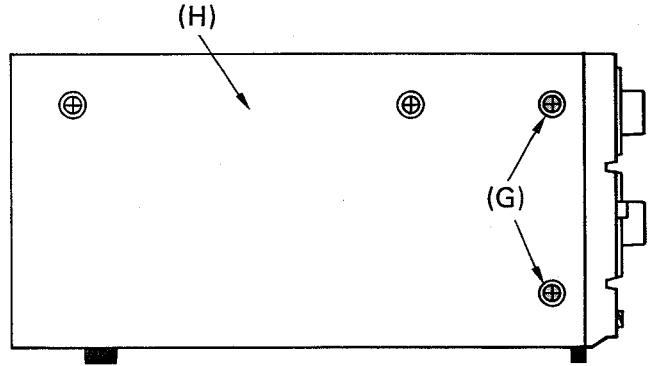


Fig. 3

4. Remove the screw (I) fastening the right side of Cabinet (J).
5. Lift the front panel side of Cabinet in the direction of the arrow and pull it backward. Then, Cabinet will be separated from Chassis. (Fig. 4)

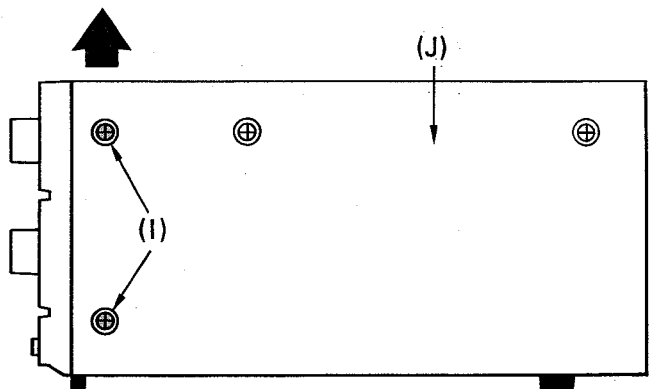


Fig. 4

C. REPAIR AND ADJUSTMENT OF PRINTED CIRCUIT BOARD

1. The removal of Cabinet Bottom Plates (K and L) will give an access to the repair or adjustment work of Cassette R/P and RF/AF P.C.Boards.

Note: It is not necessary to remove Cabinet.

DISASSEMBLY INSTRUCTIONS (Continued)

D.REMOVAL OF TAPE DECK

1. Hold the both sides of Cassette Lid (M) and lift it by 1.5 cm (approx.). Then, remove it by pulling it toward you. (Fig. 5)

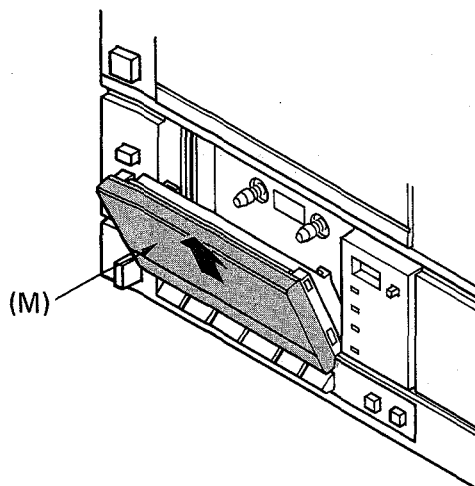


Fig. 5

2. Remove the four screws (N) fastening Tape Deck and the screw (O) fastening Tape Counter. Then, remove the 1.8 M Ω resistor (P) located near Power Switch and pull out the deck mechanism from Front Panel. (Fig.6)

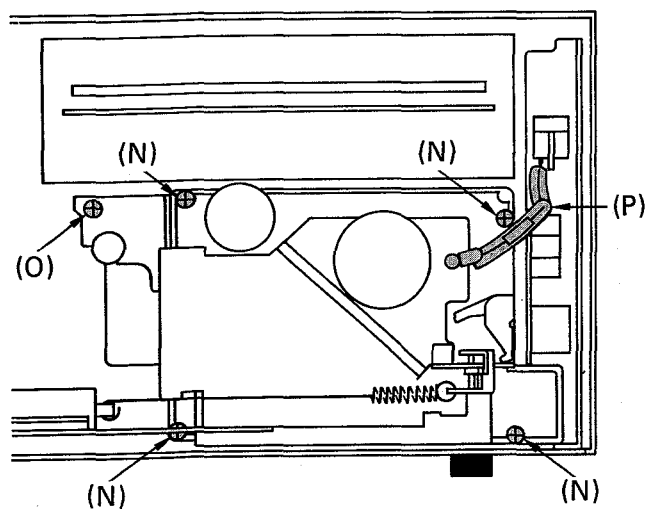
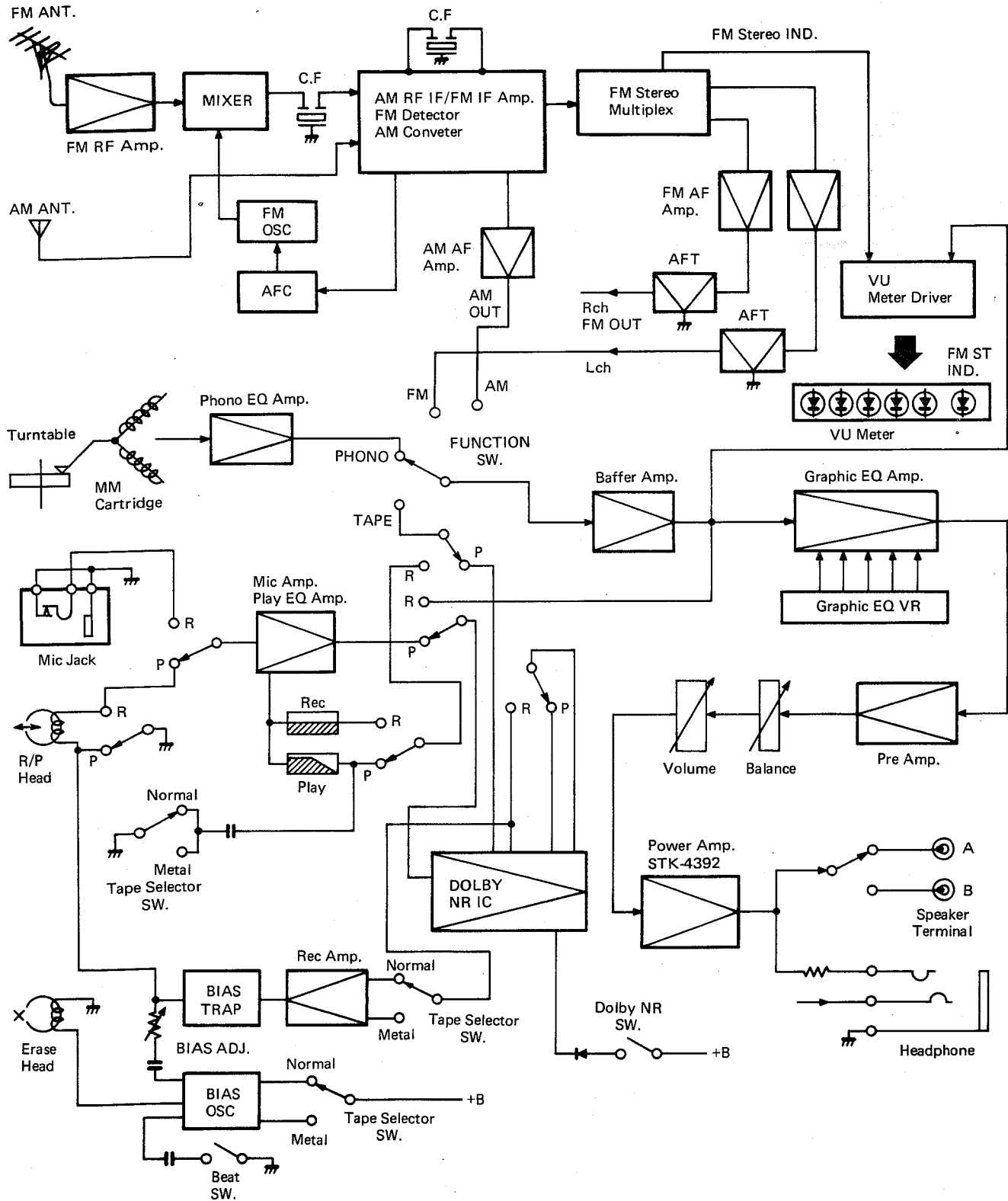
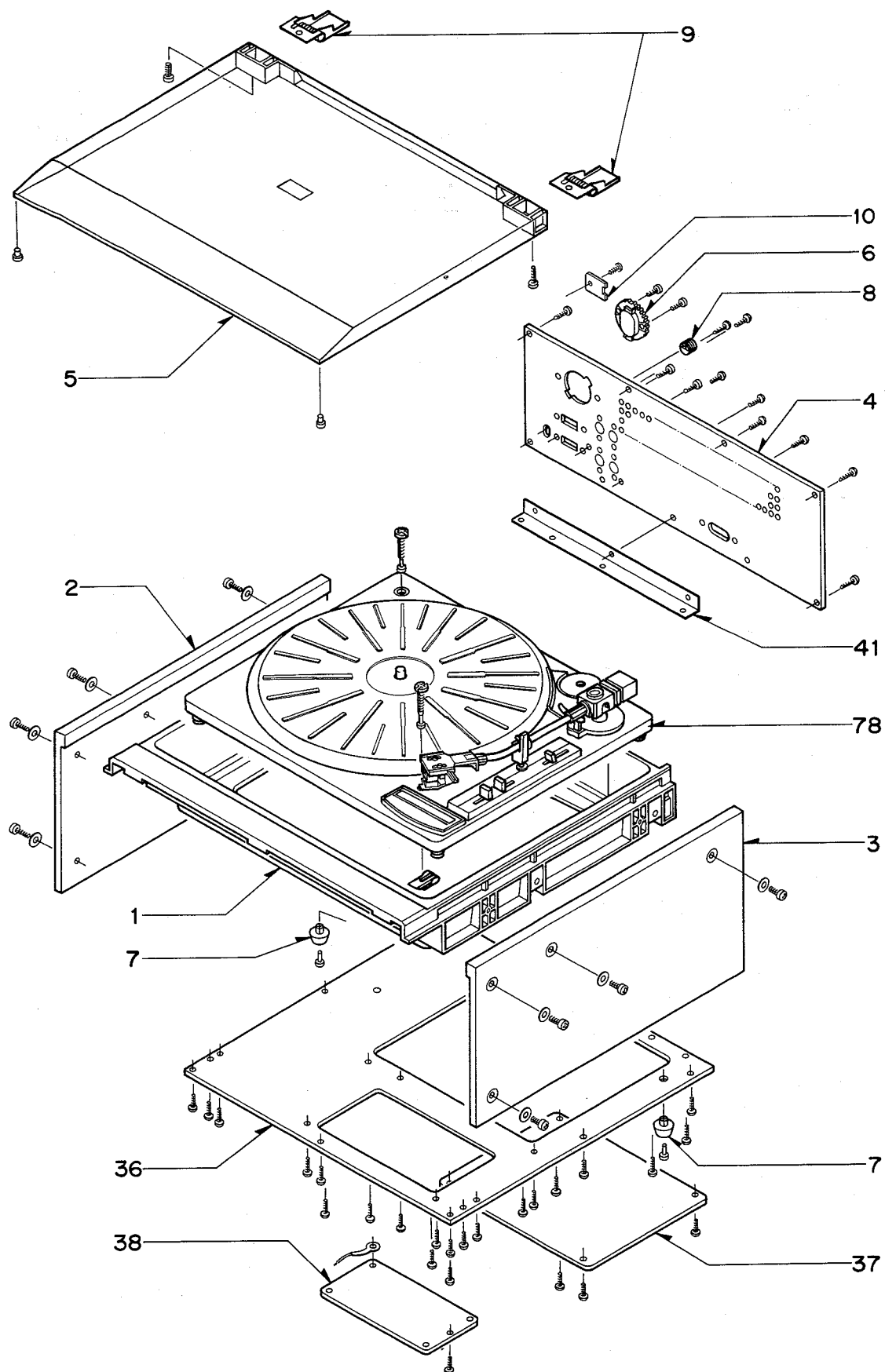


Fig. 6

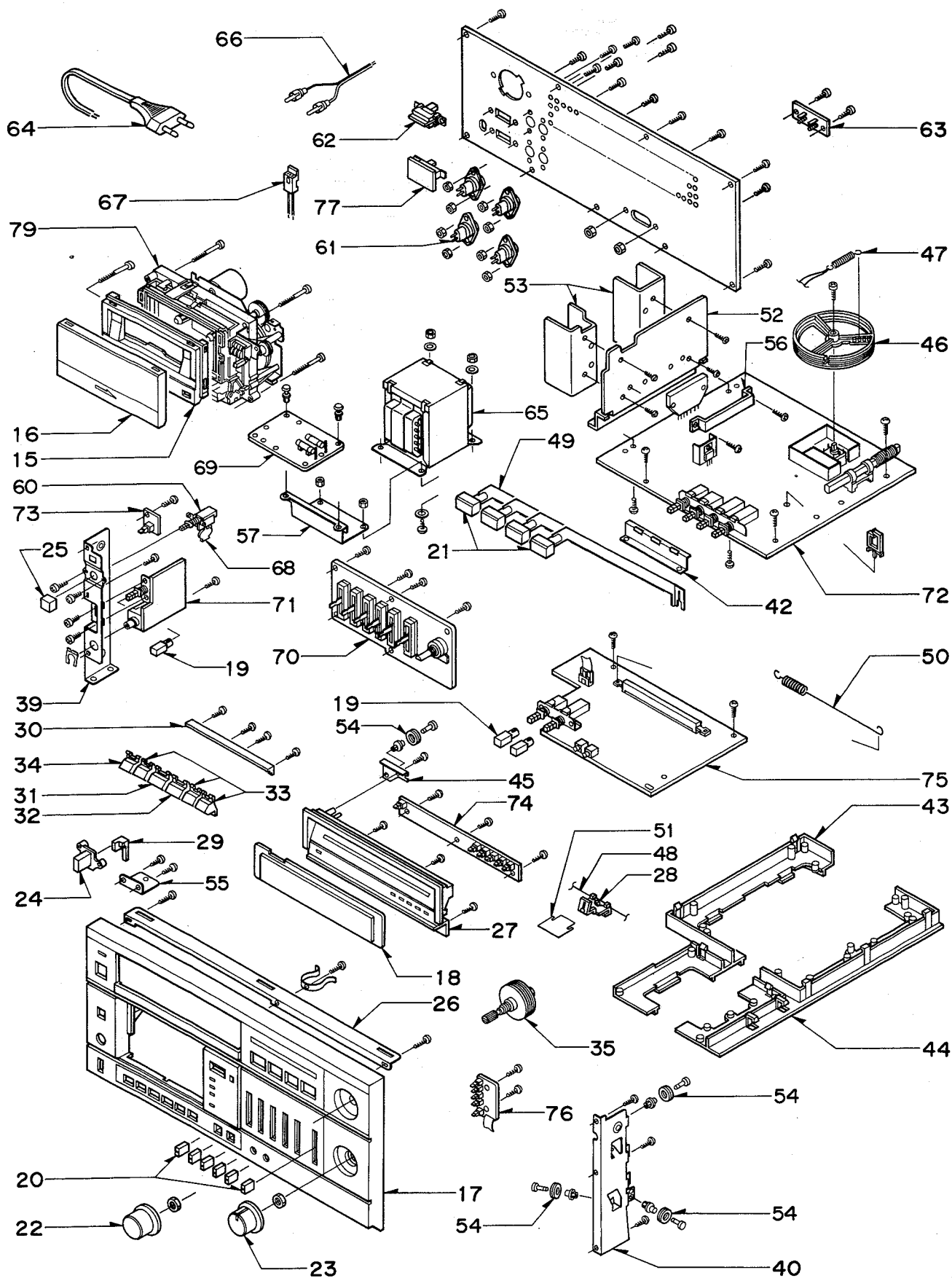
FUNCTIONAL BLOCK DIAGRAM



CABINET & CHASSIS EXPLODED VIEW



CABINET & CHASSIS EXPLODED VIEW (Continued)



PARTS LIST

PACKING PARTS LIST

Ref. No.	Parts Number	Description
	131 6 1169 06703	Box Corrugate-EXP
	131 6 2119 02031	Bag Polyethylene-EXP
	131 6 2119 02360	Bag Polyethylene-EXP
	131 6 3009 33890	Pad (Left)
	131 6 3009 33900	Pad (Right)
	131 6 3069 16350	Patching Sheet

ACCESSORIES PARTS LIST

Ref. No.	Parts Number	Description
	131 6 4169 02901	Explanatory Booklet
	131 6 4519 15700	Guarantee Certificate

CABINET PARTS LIST

Ref. No.	Parts Number	Description
1	131 2 1101 47700	Cabinet Top
2	131 2 1101 47801	Cabinet (Left Side)
3	131 2 1101 47901	Cabinet (Right Side)
4	131 2 1102 53004	Rear Cover
5	131 0 2022 90310	Lid Assy
	131 2 1107 26400	Lid
	131 2 1310 22106	Name Plate
	131 2 2904 12301	Pad Lid
6	131 2 1407 10300	Cover Decorate
7	131 2 1801 14600	Leg
8	131 2 6111 14300	Bushing
9	131 0 2002 17200	Hinge Assy
10	131 2 7104 00500	Plate Pad Switch

APPEARANCE PARTS LIST

Ref. No.	Parts Number	Description
15	131 2 1107 23201	Lid Cassette (Base)
16	131 2 1107 23301	Lid Cassette (Top)
17	131 2 1202 20800	Escutcheon Dial
18	131 2 1205 27200	Decorative Plate Dial
19	131 2 1601 64102	Knob (Speaker Select 2, Dolby Meter)
20	131 2 1601 71001	Knob (EQ, Balance)
21	131 2 1601 73002	Knob (Function Switch)
22	131 2 1601 78502	Knob (Tuning)
23	131 2 1601 78803	Knob (Volume)
24	131 2 1601 81301	Knob (Eject)
25	131 2 1601 83702	Knob (Power Switch)
26	131 2 3101 86800	Metal Mount (Top)
27	131 2 3304 18600	Plate Dial Rear
28	131 2 4101 23000	Pointer
29	131 2 4208 40800	Spacer
30	131 2 7903 00900	Holder (Knob Select)
31	141 2 1659 00301	Button Select Play
32	141 2 1659 00302	Button Select Stop
33	141 2 1659 00401	Button Select
34	141 2 1659 00402	Button Select Record

CHASSIS PARTS LIST

Ref. No.	Parts Number	Description
35	131 0 3003 23200	Shaft Dial Assy
36	131 2 1105 29300	Plate Bottom
37	131 2 1410 28300	Cover
38	131 2 1410 28400	Cover
39	* 131 2 3101 86600	Metal Mount (L)
40	* 131 2 3101 86700	Metal Mount (R)
41	* 131 2 3202 14300	Metal Reinforce
42	* 131 2 3310 17500	Metal Support
43	131 2 3614 26700	Mount P.C.B. (L)
44	131 2 3614 26800	Mount P.C.B. (R)
45	* 131 2 4106 24900	Metal Mount Pulley
46	131 2 4109 11500	Drum
47	131 2 4111 00200	Spring Dial Cord
48	131 2 4112 10201	Dial Cord
49	131 2 4219 16900	Shaft
50	131 2 5101 20102	Spring Cassette
51	131 2 5205 19100	Cushion
52	131 2 6201 31800	Plate Heat Sink
53	131 2 6201 32200	Plate Heat Sink
54	131 0 3020 11000	Pulley Assy
55	* 131 2 3101 86900	Metal Mount (Bottom)
56	* 131 2 3101 88900	Metal Mount (Power IC)
57	* 131 2 3614 26900	Mount P.C.B. (Fuse)

ELECTRICAL PARTS LIST

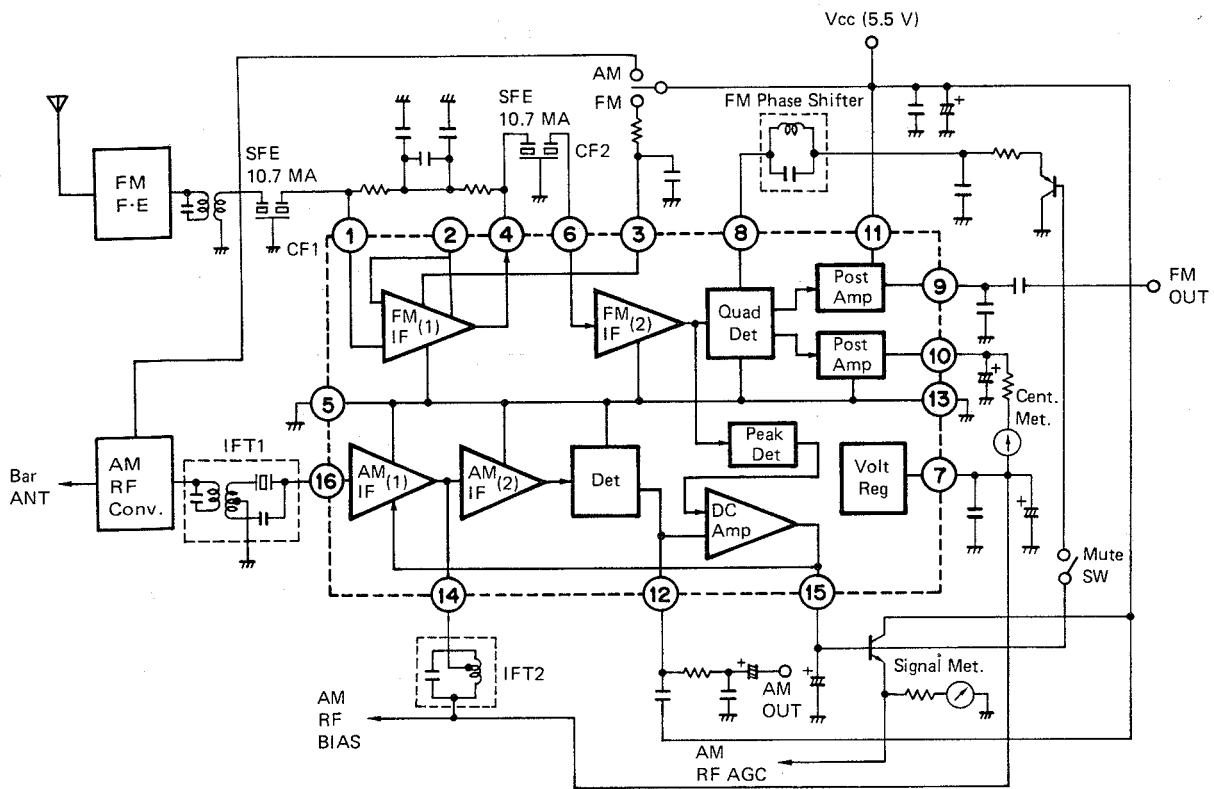
Ref. No.	Parts Number	Description
60	△ 4 2312 02522	Switch Push Power
61	4 2359 22470	Socket 2P DIN (Speaker Terminal)
62	△ 4 2312 01020	Switch Slide (Volt Select)
63	4 2379 21980	Terminal Antenna
64	△ 4 2432 00071	Line Cord
65	△ 4 2512 20220	Power Transformer
66	131 0 4006 24002	Cord Assy (Phono Input)
67	131 0 4006 26100	Cord Assy (Phono +B)
68	131 2 6114 00100	Cover Safety
69	131 0 4001 08553	Fuse P.C.B. Assy
70	131 0 4001 11580	Pre & Graphic Equalizer P.C.B. Assy
71	131 0 4001 11620	Speaker Select P.C.B. Assy
72	131 0 4001 11552	RF AF P.C.B. Assy
73	131 0 4001 11560	Power Ind. P.C.B. Assy
74	131 0 4001 11570	VU Meter P.C.B. Assy
75	131 0 4001 11590	Cassette R/P P.C.B. Assy
76	131 0 4001 11600	Cassette Ind. P.C.B. Assy
77	131 0 4001 11610	Beat Switch P.C.B. Assy
78	4 1342 00300	Auto Player (FV-125HR)
79	4 1412 00130	Cassette Deck Unit
C01	△ C2GYDP103A	Ceramic 0.01 μF 400V +100,-0%

*—Not a service part.

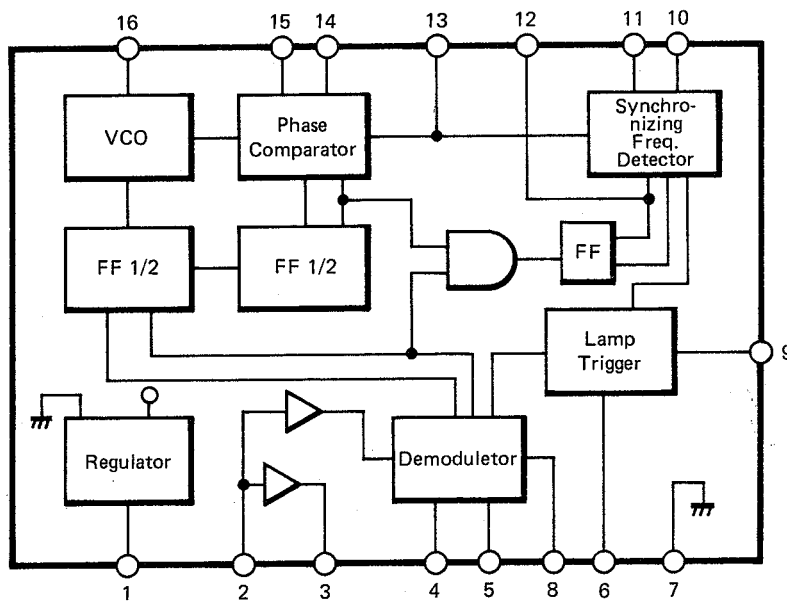
PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF AN UNIT. COMPONENTS INDICATED BY A MARK △ IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAS SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

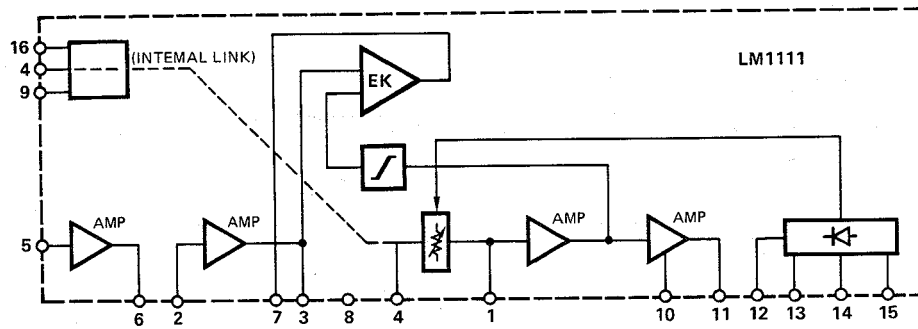
FM/AM IF AMP IC HA12413 SIGNAL FLOW



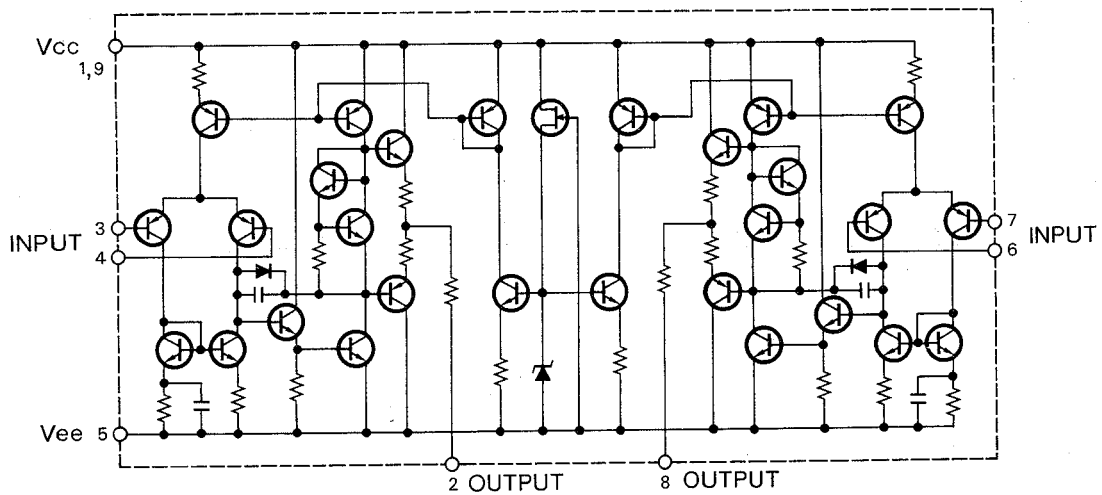
FM MPX IC LA3361 SIGNAL FLOW



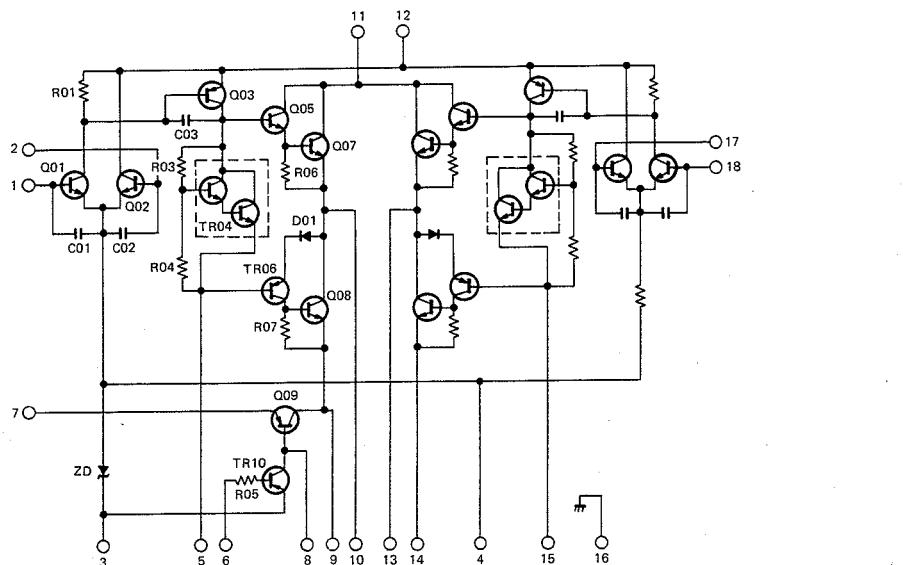
CASSETTE DOLBY NR IC LM1112 BLOCK DIAGRAM



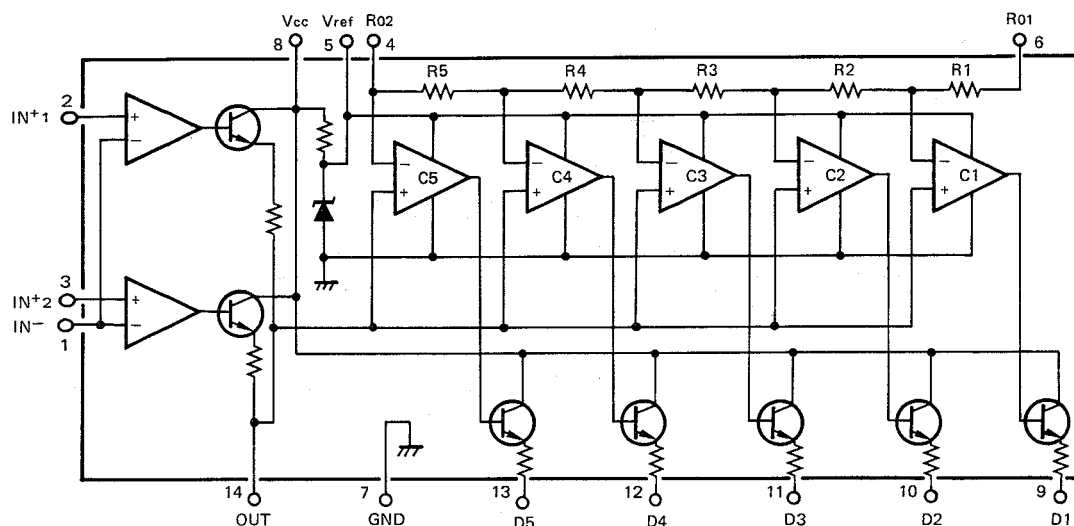
PRE AMP IC LA6458S EQUIVALENT CIRCUIT



POWER AMP IC STK-4392 EQUIVALENT CIRCUIT



VU METER IC LB1416 EQUIVALENT CIRCUIT



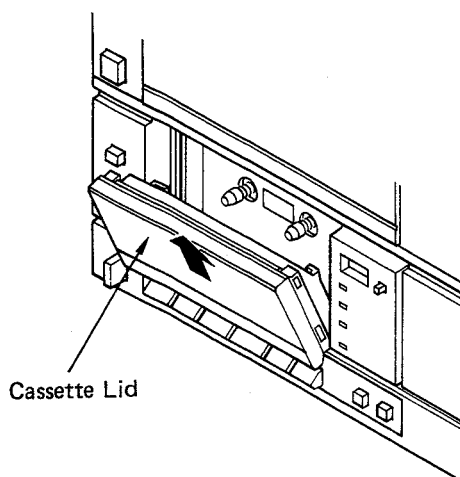
CASSETTE DECK ELECTRICAL ADJUSTMENTS

CLEANING AND DEMAGNITIZATION OF THE HEAD

If the tape-contacting surfaces of the parts such as the head, the capstan and the pinch roller are dirty, it results to irregular tape running, imperfect recording and erasing, tone deterioration, and the curling of the tape at the capstan.

• Cleaning Method

1. Remove the Cassette Lid. (Fig. 1)
2. Wipe the head, the capstan, and the pinch roller clean with a cleaning cotton swab. If they are extremely dirty, use a cotton swab moistened in absolute alcohol or cleaning liquid.
3. Insert the head cover.



Pull out the Cassette Lid in the direction of the arrow.

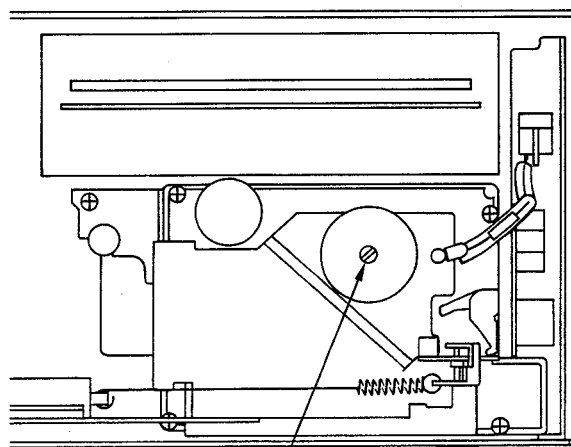
Fig. 1

• Head Demagnetization

The head is magnetized after long usage and it results to noise and tone deterioration. Therefore, demagnetize the head with a demagnetizer. Be sure to turn off the power source.

TAPE SPEED ADJUSTMENT

Play back a 3 kHz test tape (Example: TEAC MTT-111 or its equivalent) and adjust the speed adjusting volume inside the motor to obtain the playback frequency of 3000 – 3090 Hz. (Fig. 2)



Tape Speed
Adjusting Volume

Fig. 2

CASSETTE DECK ELECTRICAL ADJUSTMENTS (Continued)

HEAD AZIMUTH ADJUSTMENT

1. Play back the test tape (Example: TEAC MTT-215C 10 kHz/315 Hz) to adjust the head azimuth. Observe the output wave forms of the LEFT and RIGHT channels. First of all, play back the 10 kHz signal. Turn the azimuth adjusting screw for the R/P Head until the phase of the Left and Right channels becomes identical and their output levels are maximized. Then, play back the 315 kHz signal and check to see that the phase is identical to the phase of the 10 kHz signal. If necessary, repeat the adjustment. (Fig. 3)

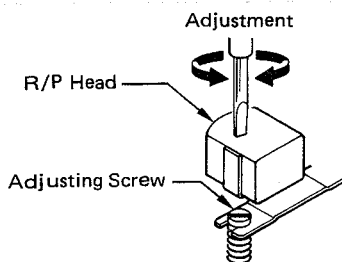


Fig. 3

DOLBY PLAYBACK LEVEL ADJUSTMENT

Set the switches to the following positions.

- DOLBY NR Switch $\longrightarrow$ OFF
- TAPE SELECT Switch $\longrightarrow$ NORMAL

1. Play back the test tape (Example: TEAC MTT-150). Then, adjust VR01 and VR02 until the voltages of TP01 and TP02 become 580 mV. (Fig. 4)

BIAS FREQUENCY ADJUSTMENT

Set the switches to the following positions.

- FUNCTION Switch $\longrightarrow$ TAPE
- DOLBY NR Switch $\longrightarrow$ OFF
- TAPE SELECT Switch $\longrightarrow$ METAL

BIAS CURRENT ADJUSTMENT

1. Insert a blank tape into the cassette deck and set the deck in the recording mode. Set the beat switch in the original mode and adjust the bias frequency to 47 kHz by turning the core of the bias OSC coil.
2. Change over the beat switch and check that the bias frequency changes about 1.5 kHz. Then, set the beat switch to its original mode.

TRAP COIL ADJUSTMENT

1. Connect the AC VTVM to PIN 1 and PIN (E) and to PIN 2 and PIN (E) with the deck in the recording mode and perform the adjustment by turning the cores of T01 and T02, so that the indicator of the AC VTVM swings to the maximum without changing when the BEAT Switch is changed from LEFT to RIGHT or vice versa.

BIAS CURRENT ADJUSTMENT

- TAPE SELECT Switch $\longrightarrow$ NORMAL

1. Connect the AC VTVM to Pin Nos. 1 and 2 and then, adjust VR05 and VR06 until the bias current becomes approximately 440 μ A (4.4 mV). At this time, perform the adjustment, observing both right and left channels.
2. Set the TAPE SELECT Switch to "METAL" and check that the bias current changes to 900 μ A (approx.)

R/P CURRENT ADJUSTMENT

1. Visually set VR03 and VR04 in advance to almost the center of the positions to be adjusted. Then, adjust VR03 and VR04 until the R/P level meets the specification.

- TAPE SELECT Switch $\longrightarrow$ NORMAL

Record the bulk-erased tape AC223 and play it back. At this time, the voltages of TP01 and TP02 should be within 200 mV $\pm$ 1 dB (180 mV – 220 mV) in the playback mode while they are 200 mV in the recording mode.

If there is a difference in voltages at recording between the right and left channels, it should be within $\pm$ 1 dB.

- TAPE SELECT Switch $\longrightarrow$ METAL

Record the bulk-erased tape AC711 and play it back. At this time, the voltages of TP01 and TP02 should be within 200 mV $\pm$ 1.5 dB (168 mV – 238 mV).

R/P FREQUENCY CHARACTERISTIC RESPONSE ADJUSTMENT

1. Insert a blank tape into the cassette deck and set the deck in the recording mode. Then, apply the recording signals of 125 Hz, 1 kHz, and 12.5 kHz (10 kHz) to the deck, so that the voltages of TP01 and TP02 become 32 mV.
2. Perform the recording and playback operations, alternately turning the DOLBY NR Switch on and off and setting the TAPE SELECT Switch to "NORMAL" and "METAL". After that, adjust VR05 and VR06 until the R/P frequency meets the specification.

P.C. BOARD ALIGNMENT POINTS (CASSETTE SECTION)

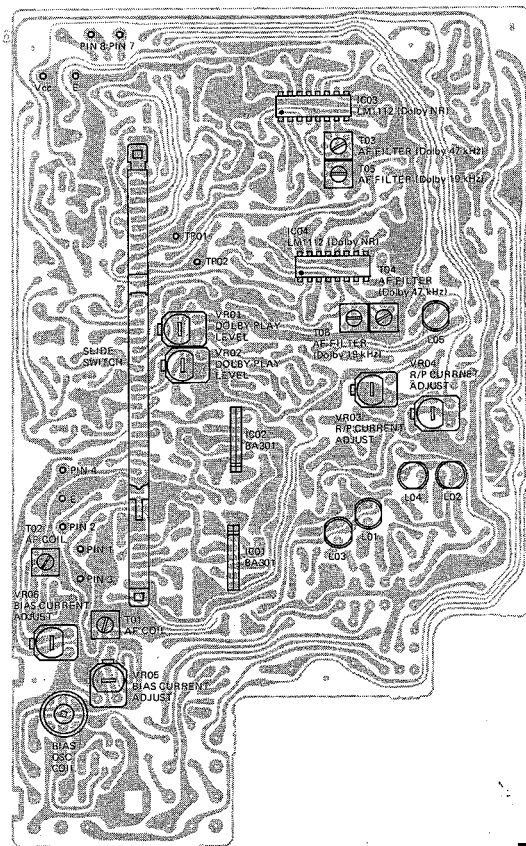


Fig. 4

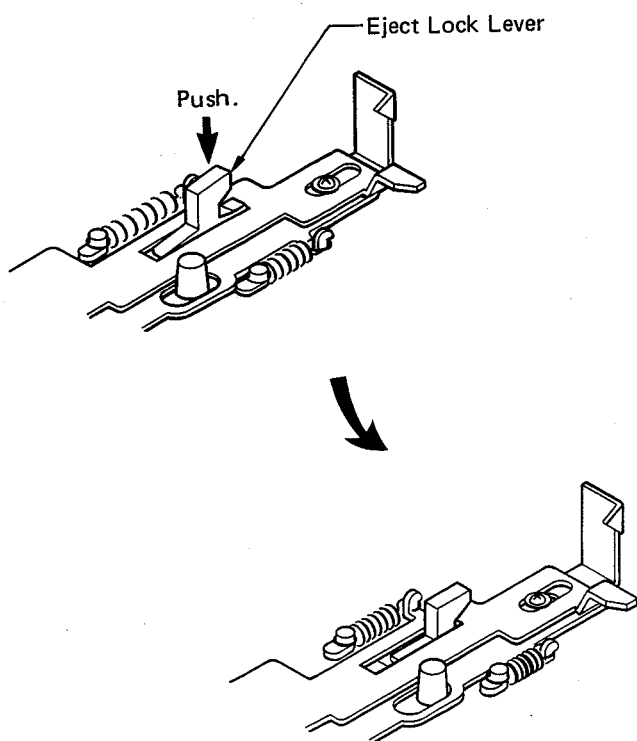
MECHANICAL ADJUSTMENTS

EQUIPMENT REQUIRED

- ▶ Cassette-type Torquemeter (100 g-cm/160 g-cm)
- ▶ Silicone Grease (SHIN-ETSU SILICONE: KS-64)
- ▶ Round-nose Pliers
- ▶ Plus Screwdriver
- ▶ Paint or glue

GENERAL REMARKS

- ▶ Before adjusting the mechanism of the unit, clean the tape contacting surfaces with a soft cloth soaked in alcohol. Trouble may occur because of oil and grease stains.
- ▶ The belts must be kept clean while an adjustment or repair work is performed.
Silicone grease (SHIN-ETSU SILICONE KS-64) is applied to the Wind Belt to protect it from abrasion.
- ▶ Silicone grease is not applied to the wind belt for servicing.
- ▶ If the Pinch Roller or belt has quality deterioration such as scratches, replace it with a new one.
- ▶ This mechanism does not function when power is not supplied and any one of the buttons is pressed.
- ▶ The mechanism stops functioning soon when the cassette holder is opened and one of the select buttons (except for the Pause button) is pressed because the Eject Plate and the Lock Plate are locked by the Eject Lock Lever. If the mechanism is required to function under this condition, push the Eject Lock Lever as illustrated, so that the Lever is released and the mechanism functions normally.



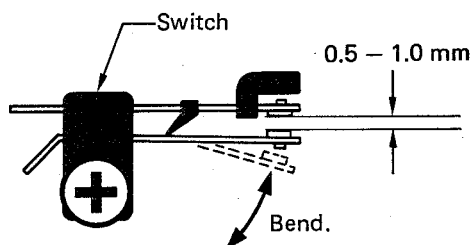
Position Adjustment of Leaf Switches

This model has the following five leaf switches. Checking and adjustment for each switch shall be conducted in accordance with each adjusting items. The unit should be set in the stop mode at each adjustment.

- * Trigger Switch
- * Motor Switch
- * Pause Switch
- * Play Muting Switch
- * Record Switch

NOTE:

The clearance of the switch contacts should be 0.5 — 1.0 mm when the switch is not mounted on the unit. If not, adjust the clearance by carefully bending the contacts.

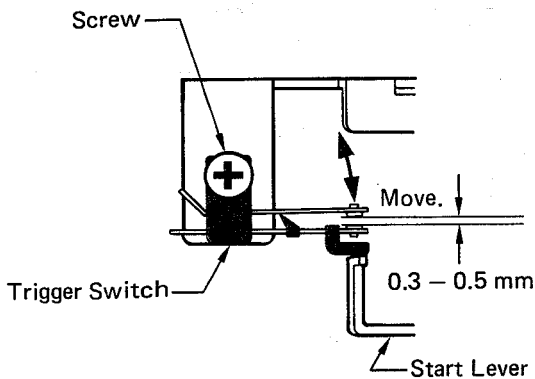


MECHANICAL ADJUSTMENTS (Continued)

1. Trigger Switch

This switch works as a trigger to make the mechanism function. When one of the select buttons (except for the Record button) is pressed, the trigger switch is turned on by the Start Lever, so that the Motor starts rotating. After that, this switch is turned off when the mechanism has completely finished its function.

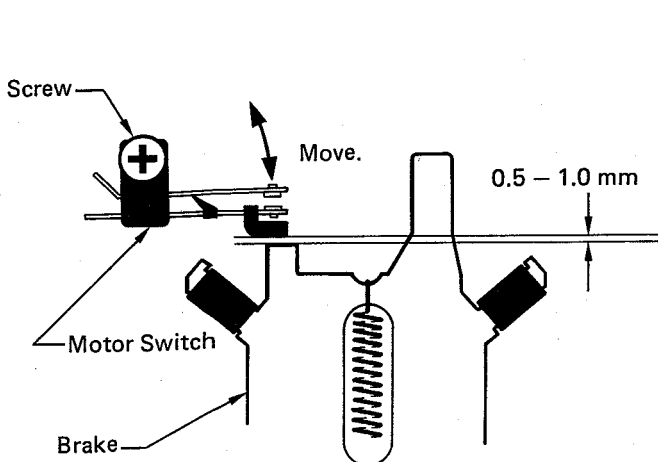
- * Check that the Trigger Switch touches the Start Lever and the clearance of the switch contacts is 0.3 – 0.5 mm.



2. Motor Switch

This switch is connected in parallel to the Trigger Switch. The driving motor rotates the Flywheel and the rotational force transferred by the Actuate Gear makes the mechanism function. Then, the motor switch is turned on by the brake.

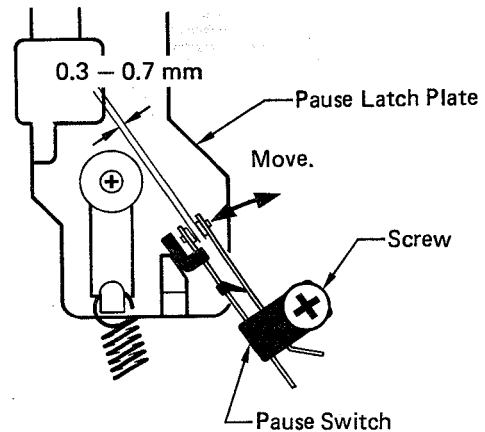
- * Check that the clearance between the Motor Switch and Brake is 0.5 – 1.0 mm.



3. Pause Switch

This switch is used to light the L.E.D. which indicates the pause mode and is turned on or off by the Pause Latch Plate when the Pause button is pressed.

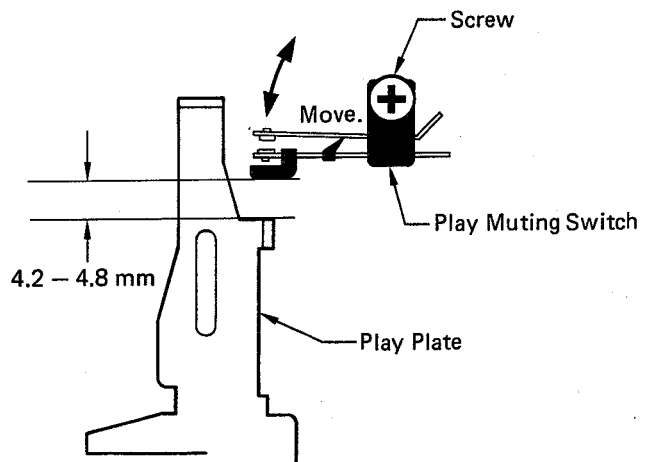
- * Check that the clearance of the switch contacts is 0.3 – 0.7 mm with the Pause Switch in contact with the Pause Latch Plate as illustrated.



4. Play Muting Switch

This switch is turned on by the Play Plate when the unit is set in the recording or playback mode, and it turns off the muting circuit.

- * Check that the clearance between the Play Muting Switch and the Play Plate is 4.2 – 4.8 mm as illustrated.

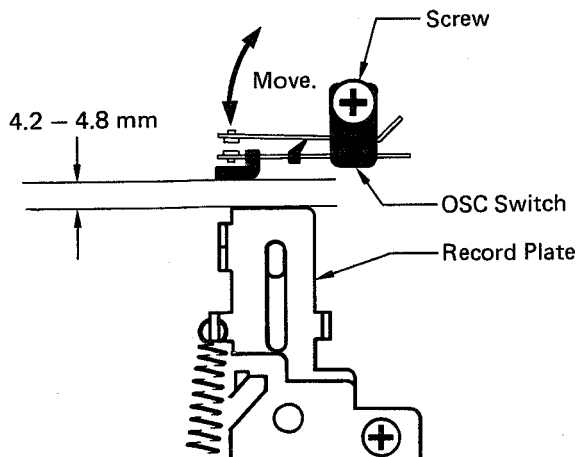


MECHANICAL ADJUSTMENTS (Continued)

5. REC Switch

This switch is turned on by the Record Plate when the unit is set in the recording mode, turns on the OSC circuit, and lights up the L.E.D. indicating the record mode.

* Check that the clearance between the OSC Switch and the Record Plate is 4.2 – 4.8 mm as illustrated.

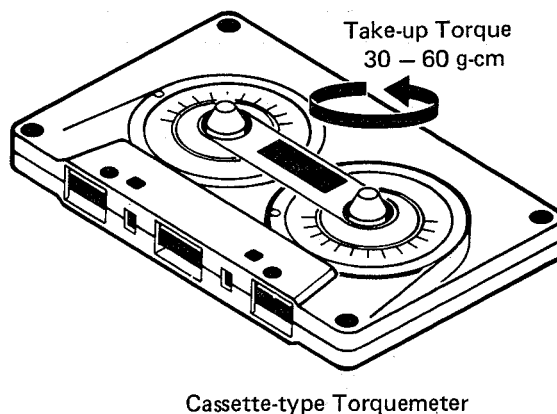


Loosen the screws fastening each switch and move the switches to the specified position if position adjustments are required.

After adjustment, tighten the screws and secure the switches with paint or glue.

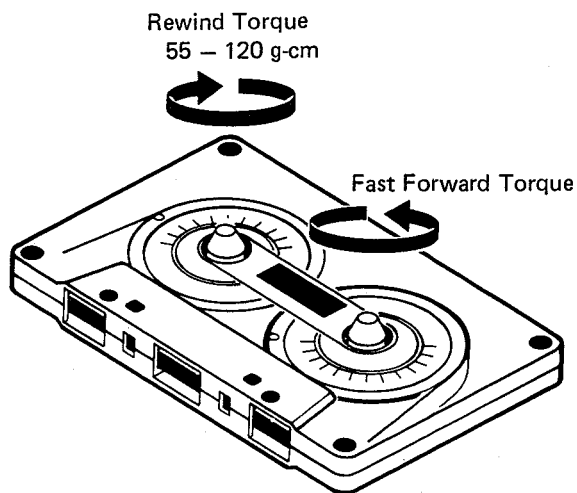
Take-up Torque

1. Insert a cassette-type torquemeter (100 g-cm) into the cassette compartment and set the unit in the playback mode. Then, check that the take-up torque is 30 – 60 g-cm.
2. If not, replace the Friction with a new one.



F.FWD and Rewind Torques

1. Insert a cassette-type torquemeter into the cassette compartment and measure the fast forward and rewind torques. Check that each torque is 55 – 120 g-cm.

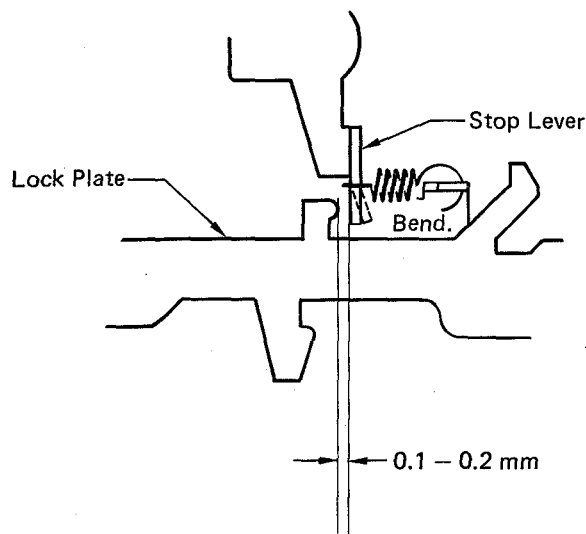


2. If more than the specified torque is obtained, apply a little amount of silicone grease (Example: KS-64) into the groove of the belt engaged in the Fast Wind Gear, rotate the Fast Wind Gear, and apply silicone grease to the Wind Belt.
3. If less than the specified torque is obtained, replace the Wind Belt with a new one and apply a little amount of silicone grease (Example: KS-64) to the Wind Belt in the same manner as in item 2.

MECHANICAL ADJUSTMENTS (Continued)

Malfunction of Automatic Shut-off Mechanism

1. If the unit is set in the stop mode while the tape is running, check that the clearance between the Stop Lever and the Lock Plate is 0.1 – 0.2 mm as illustrated.
2. If necessary, adjust the clearance by bending the Stop Lever as illustrated.

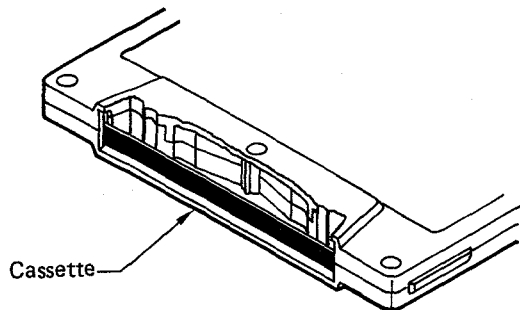


3. When the unit still malfunctions after the above adjustment, replace the Take-up Reel with a new one.

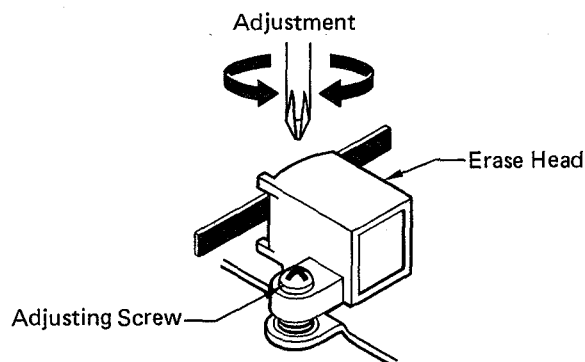
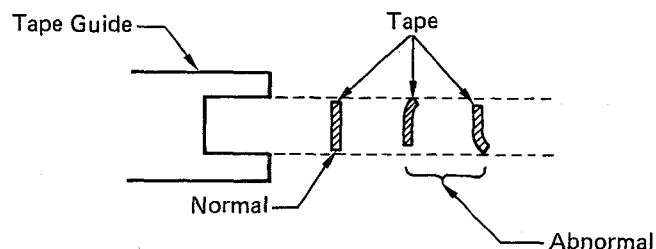
Tape Running Condition Adjustment

Whenever the Erase Head has been removed or replaced, perform the tape running condition adjustment as follows:

1. Cut the cassette half (Example: TDK C-120) as illustrated and use it for the adjustment.

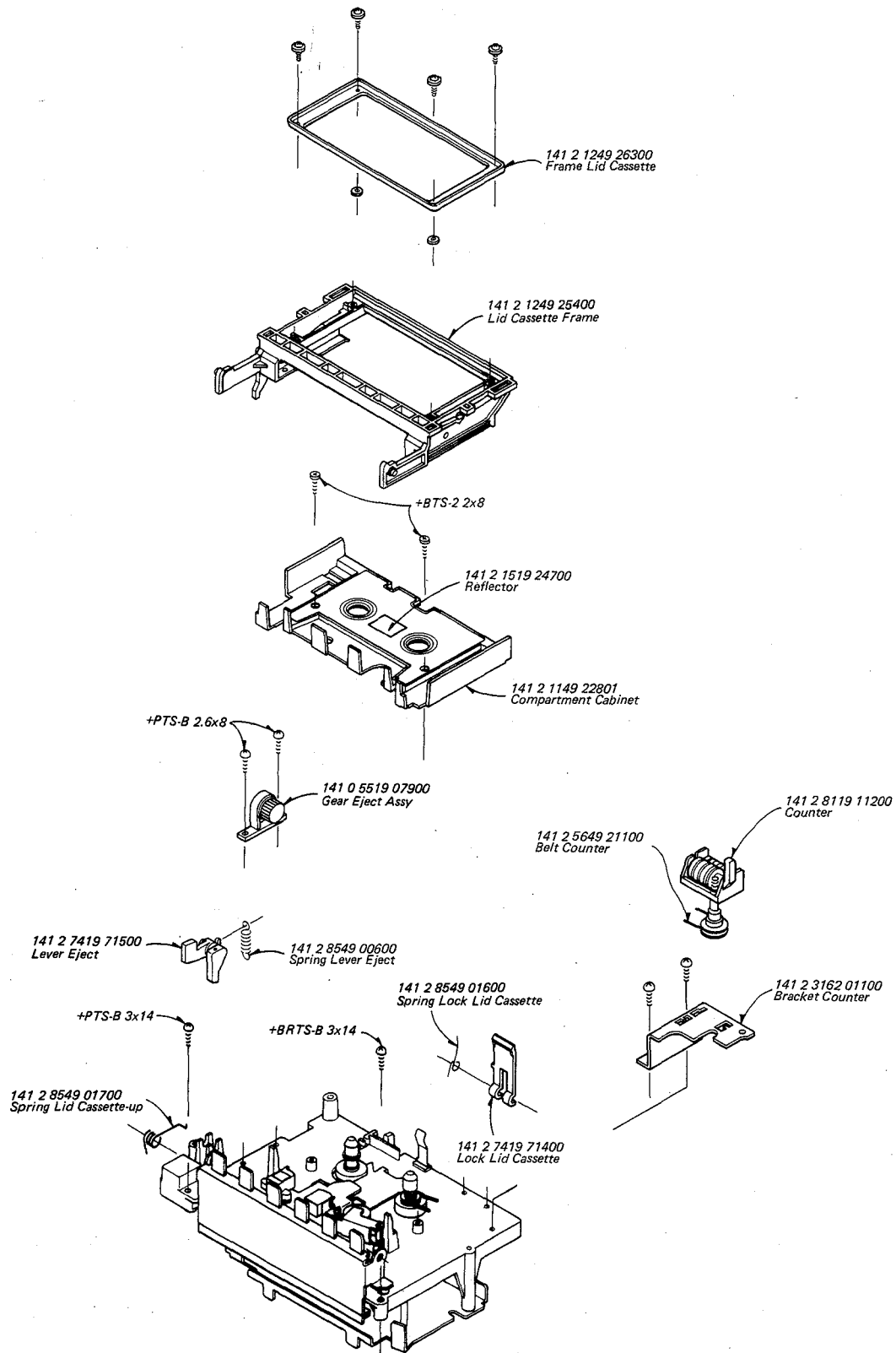


2. Insert the cassette half into the cassette compartment. Then, turn the adjusting screw while the tape is running, so that the tape does not curl along the Tape Guide of the Erase Head as illustrated.

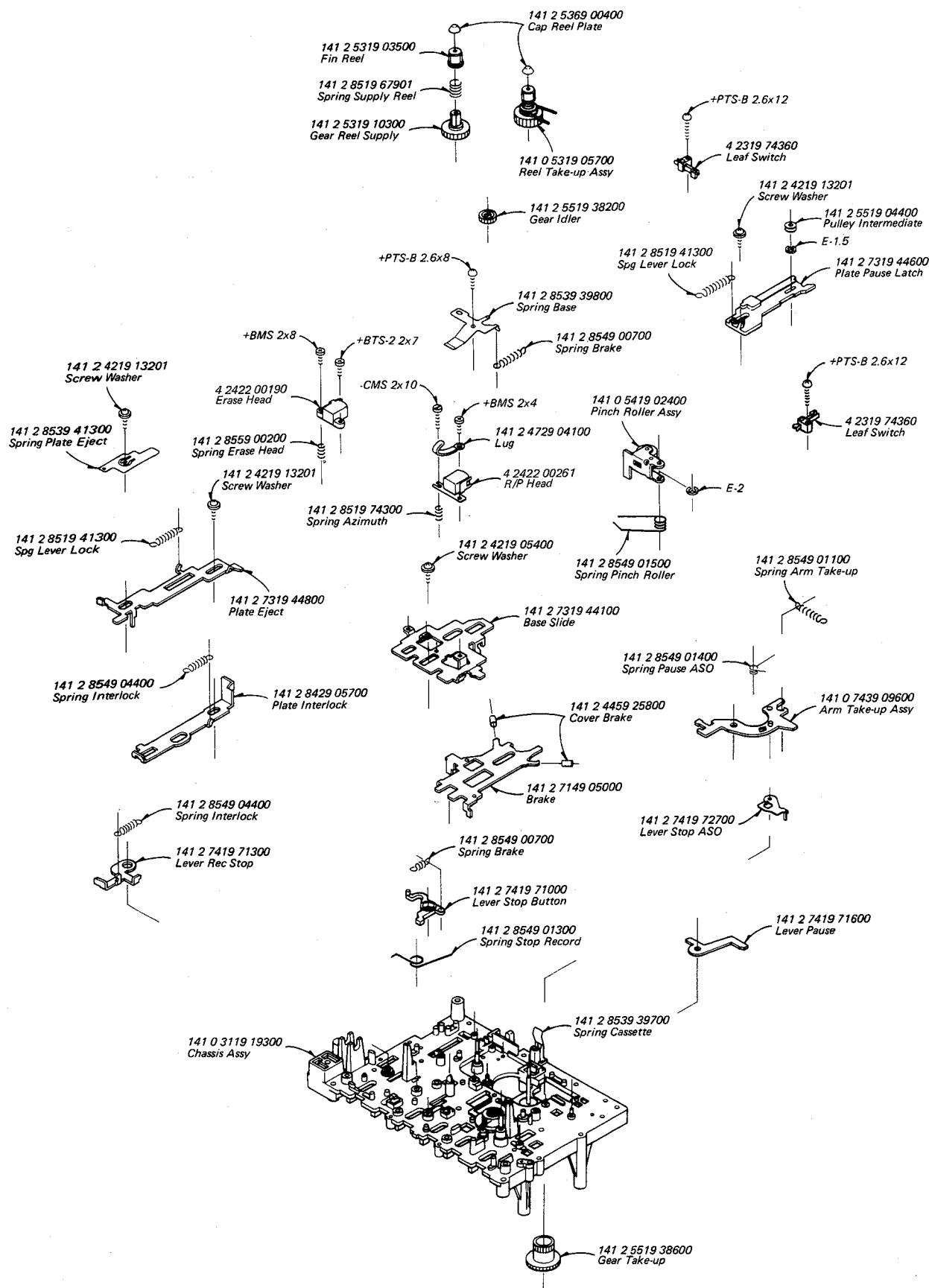


3. If necessary, adjust the screw until the tape is exactly centered in the Tape Guide of the Erase Head.
4. After the adjustment, secure the adjusting screw with paint or glue.

CASSETTE DECK EXPLODED VIEW (TOP VIEW 2-1)

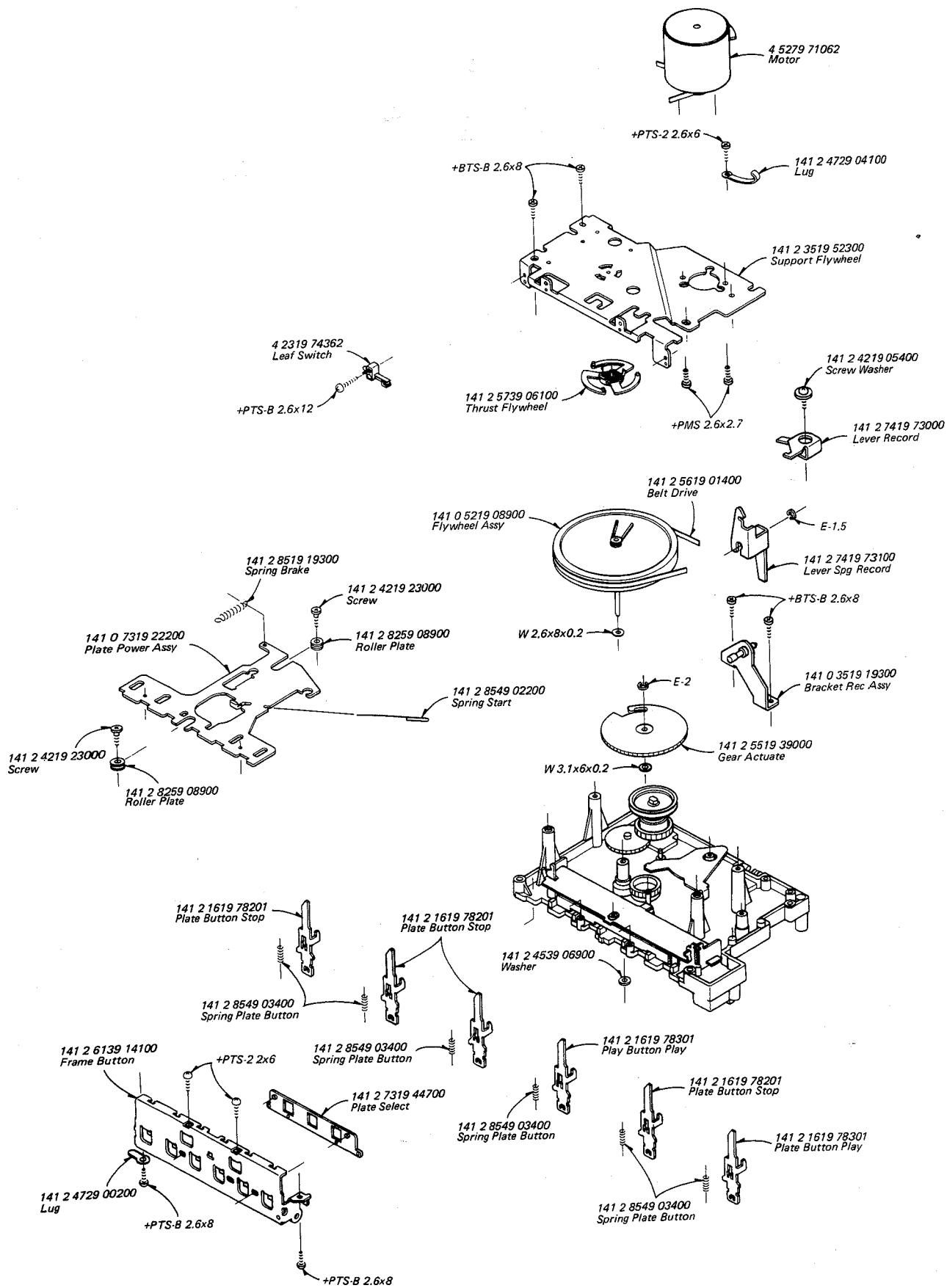


CASSETTE DECK EXPLODED VIEW (Continued)

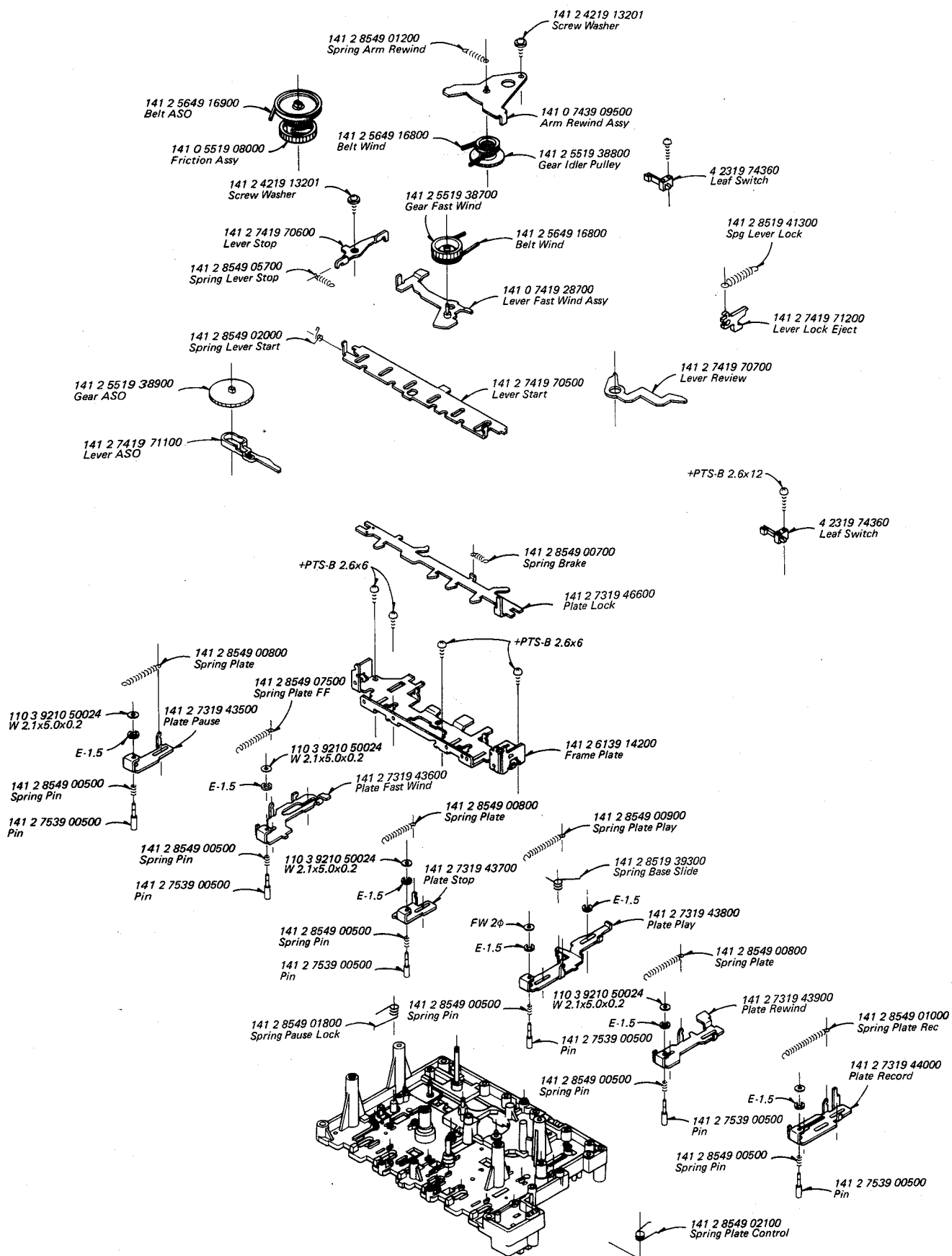


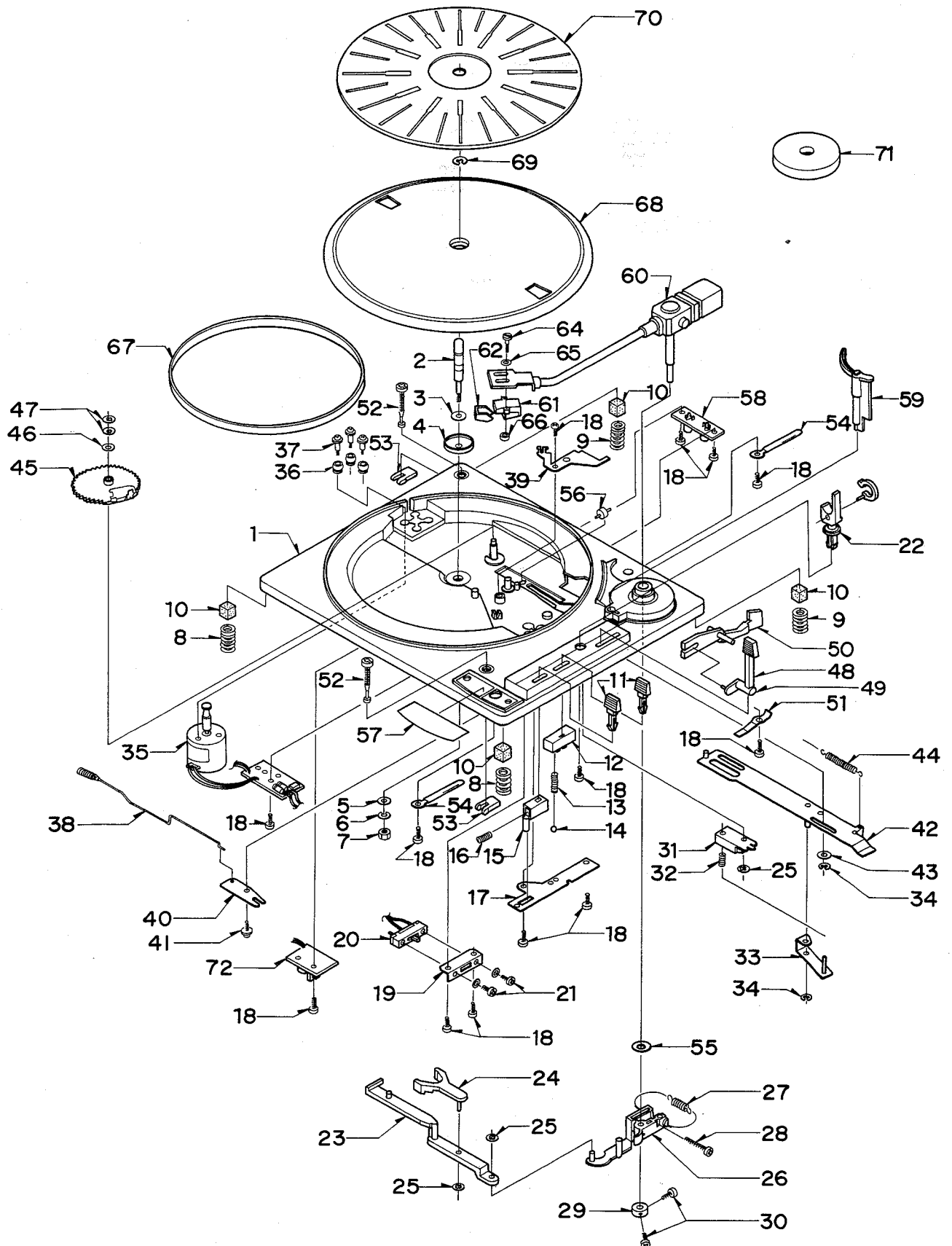
CASSETTE DECK EXPLODED VIEW (Continued)

(BOTTOM VIEW 2-1)



CASSETTE DECK EXPLODED VIEW (Continued)





TURNTABLE PARTS LIST

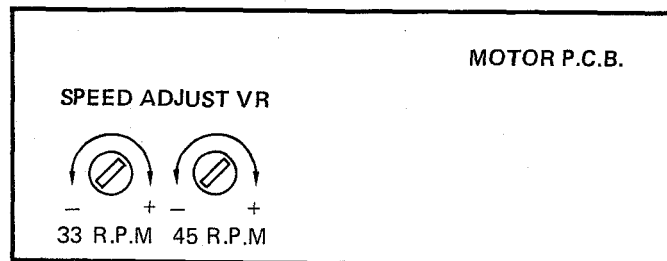
FV-125HR PARTS LIST

Ref. No.	Parts Number	Description	Ref. No.	Parts Number	Description
1	FF-UCP006B	Panel	38	FF-ETA048	Reject Rod Ass'y
2	FF-TTS054	Turntable Shaft	39	FF-EPT060	Reject Rod Base Plate
3	FZ-WAP200	Thrust Washer	40	FF-EPT-037	Reject Lever A
4	FZ-WAM129	Turntable Washer	41	JZNK30060UFB	Screw
5	KPW-40UF2	Washer	42	FF-ETA019	Sub Plate Ass'y
6	SW-40S2	Spring Washer	43	FZ-WAP010	Thrust Washer
7	RN-40UF2	Nut	44	FF-BTN033	Tension Spring
8	FF-BCP040	Cushion Spring	45	FB-GGA342-G	Main Gear Ass'y
9	FF-BCP039	Cushion Spring	46	FZ-WAP084	Thrust Washer
10	FF-GBS016	Cushion	47	CSW-040040P	CS Washer
11	FF-ISP017	Lever Knob	48	FF-ISP018	Cueing Lever
12	FF-ISP027	Base Part of Speed Changing Knob	49	FF-ISP003	Connection Lever A
13	FF-BCP027	Compression Spring	50	FF-ISP031	Connection Lever
14	SB-5-32	Steel Ball	51	FF-BPP018	Spring Plate
15	FF-ISP026	Base Part of Reject Knob	52	FF-FSC012	Cramp Screw
16	FF-BCP028	Compression Spring	53	FF-BPL004	Cramp Spring
17	FF-EPT055	Holder Plate	54	FF-EIS001	Cramp Wire
18	JNP30080UFB	Screw	55	FZ-WAP208	PU Thrust Washer
19	FF-EPT056	Base Plate of Slide Switch	56	FF-ISP023	Guide Roller
20	SL-012-104	Slide Switch	57	FF-NKP034	Ornamental Plate
21	JZNS26040UF	Screw	58	FF-ETA017-S	RCA Jack
22	FF-ETA033	PU Stand Ass'y	59	FF-ISP028	Lifter
23	FF-EPT036	Starting Lever Ass'y	60	PA-199S-3	Pick-up
24	FF-OCL004	Switch Lever A (FF-ETA020)	61	MG-1710	Cartridge (W/ Stylus)
25	CSW-030030P	CS Washer	62	CN-211	Stylus
26	FF-EPT063	Return Link Ass'y	63	6-2254-1	Stylus Cover
27	FF-BTN028	Adjusting Spring (FF-ETA049)	64	8-1496-7	Screw
28	JNK30180UF	Adjusting Screw	65	8-1498	Washer
29	FF-SBS006	Return Link Boss	66	8-1497	Nut
30	FF-ESC028	Screw	67	FT-GBR009	Belt
31	K2-N	Switch	68	FF-TTA107	Turntable
32	FF-BCP043	Compression Spring	69	ETW-060050P	E Ring
33	FF-ETA055	Switch Operating Lever Ass'y	70	FF-TCS031	Turntable Rubber
34	ETW-040030	E Ring	71	FF-EAT007	Adaptor
35	FF-ETA077	Motor Ass'y	72	FF-ETA134	Print Base Ass'y
36	FF-GBS017	Cushion Rubber			
37	FF-ESC017	Screw			

TURNTABLE ADJUSTMENTS

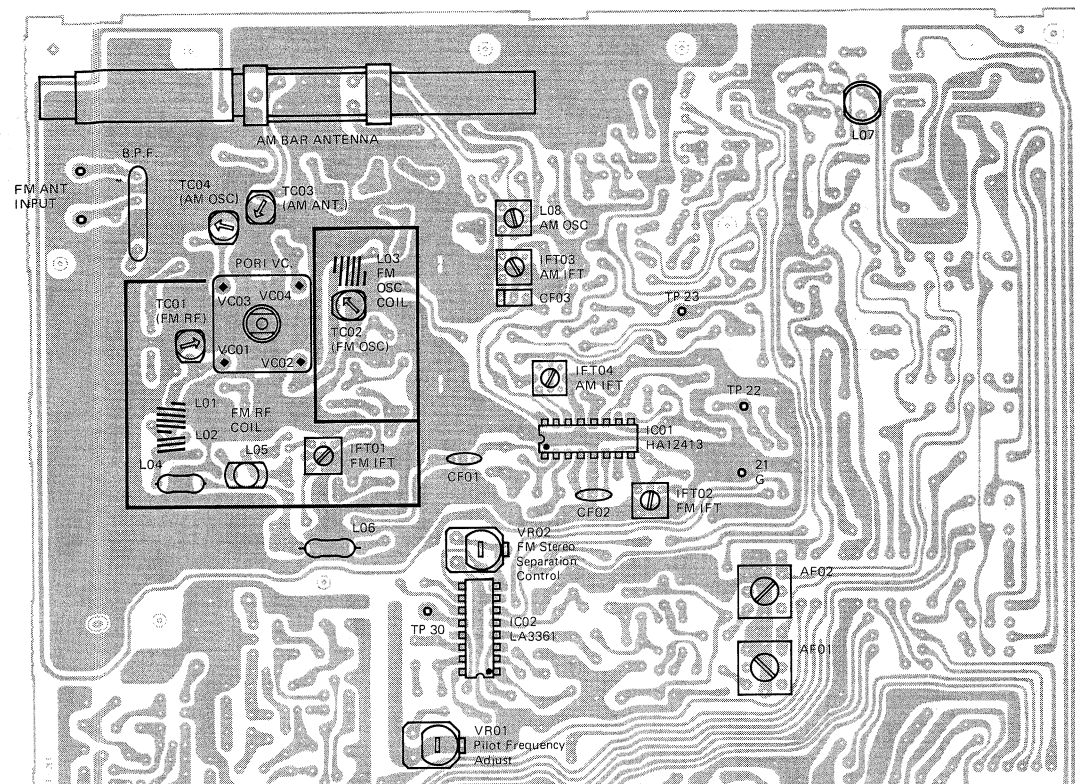
SPEED ADJUSTMENT

- This unit is built-in F·G· SERVO circuit and the speed has been adjusted accurately in the factory.
- If, for any reason, when you change the speed, turn these volumes with the screwdriver to "+" direction or "-" direction.
 - "+" direction This increases the speed.
 - "-" direction This decreases the speed.



(BOTTOM VIEW)

PRINTED CIRCUIT BOARD ALIGNMENT POINTS (TUNER SECTION)



AM TUNER ALIGNMENT

Standard test frequency 400 Hz and Modulation 30% at AM

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. IF ALIGNMENT	Connect 455 kHz IF gene-scope output to VC03 and ground terminal. Use 0.1 μ F capacitor in series with generator lead.	Position of non-interference Minimum Frequency	Connect IF gene-scope input to TP23, and ground terminal.	Adjust AM IFT (IFT03) and (IFT04) for maximum gain and best symmetry. Keep signal low enough for noise on response.
2. AM (RF) TRACKING ALIGNMENT (600 kHz)	Connect standard loop antenna to output terminal of gene-scope. Place bar antenna 60 cm away from loop antenna. Generator setting to 600 kHz	Center of 600 kHz calibration mark on dial	Connect AC VTVM and Oscilloscope to SPEAKER OUT jack.	Adjust AM OSC (L08) and AM Antenna for maximum gain output.
3. (1400 kHz)	Change generator setting to 1400 kHz.	Center of 1400 kHz calibration mark on dial	Same as above	Adjust TC04 (OSC) and TC03 (ANT.) for maximum deflection. Repeat steps (2) and (3) until optimum alignment is reached.

FM TUNER ALIGNMENT

Standard test frequency 400 Hz and deviation ± 40 kHz

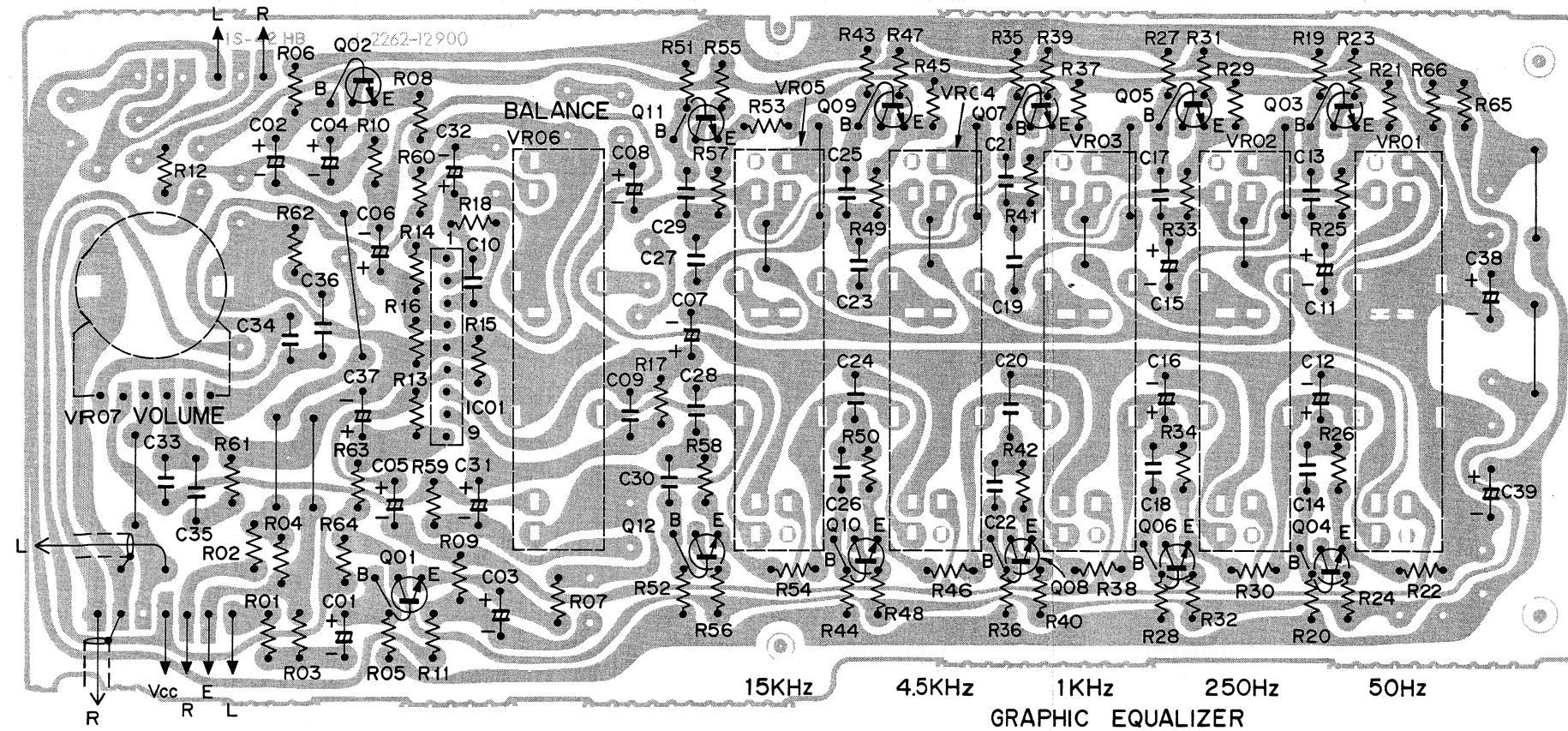
ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
Note: The FM IF circuit utilizes a non-turnable ceramic filter which establishes the IF bandpass. To insure symmetrical turning and selectivity, the IF must be aligned precisely to the center of the filter bandpass, rather than to 10.7 MHz as in conventional LC circuits.				
1. IF ALIGNMENT	Connect 10.7 MHz IF gene-scope output to VC01 and ground terminal.	Position of non-interference Minimum frequency	Connect IF gene-scope input to TP22.	Adjust FM IFT (IFT01) and (IFT02) for maximum gain and best symmetry.
2. FRONT END ALIGNMENT		Tuning knob fully counter-clockwise		Place center of dial pointer on "0" (zero) and secure pointer with bonding material.
3. FRONT END ALIGNMENT (88 MHz)	Connect FM RF generator through FM Dummy Ant. to FM ANT. terminals. Set generator to 88 MHz. Modulate with 400 Hz to provide ± 40 kHz deviation. Set generator output with attenuator as low as possible.	Center of 88 MHz calibration mark on dial	Connect AC VTVM, Distortion Meter, and Oscilloscope to SPEAKER OUT jack.	Adjust FM OSC Coil (L03) and FM RF Coil (L01) for best waveform and minimum distortion.
4. (108 MHz)	Change generator setting to 108 MHz.	Center of 108 MHz calibration mark on dial	Same as above	Adjust TC02 (OSC) and TC01 (RF) for best waveform and deflection.
Note: Repeat Items 3 and 4, and confirm that Tracking Error is minimized and best sensitivity is obtained at each frequency point. Then, set generator to 98 MHz and confirm that the pointer is correctly set on the dial plate.				
5. PILOT FREQUENCY ADJUSTMENT		Position of non-interference	Connect Frequency Counter to TP30 and ground terminal.	Adjust VR01 until Frequency Counter indicates 19 kHz ± 50 Hz.
6. FM STEREO SIGNAL SEPARATION CONTROL ADJUSTMENT	Connect FM Stereo SG to Ant. terminals. 19 kHz signal ON Main channel, sub channel signal ON Apply 1000 Hz signal from LEFT Channel.	Same as above	Connect AC VTVM, Distortion Meter and Oscilloscope to RIGHT Channel SPEAKER OUT jack.	Adjust VR02 for minimum output. Note: Do not turn Low Pass Filter as already adjusted.
	Same as above for RIGHT Channel		Same as above for LEFT Channel	

* Use a screwdriver with plastic grip for all adjustments.

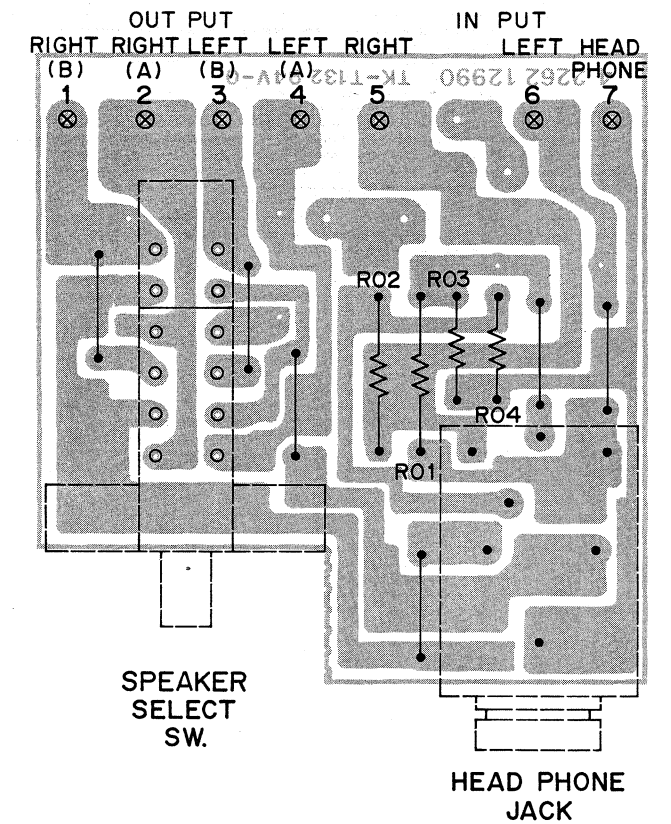
CAUTION:

This precision high-fidelity instrument should be serviced only by qualified personnel, trained in the repair of transistor equipment and printed circuitry.

PRE & GRAPHIC EQUALIZER P.C.BOARD (BOTTOM VIEW)



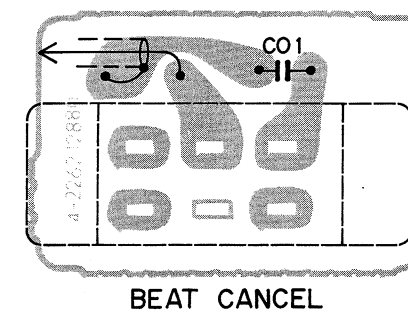
SP. SELECT P.C.BOARD (BOTTOM VIEW)



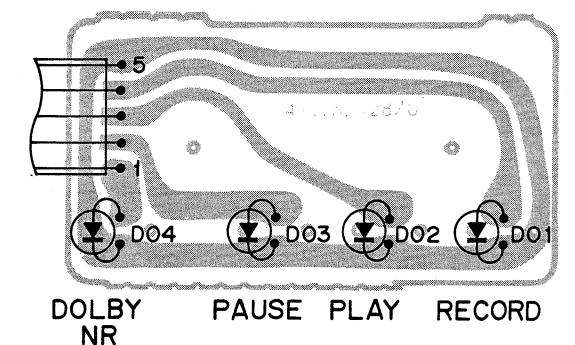
IC PIN NUMBERS VOLTAGES										
SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9
IC01	LA6458	20.7V	10.4V	10.4V	10.3V	0V	10.3V	10.4V	10.4V	20.7V

TRANSISTOR DC VOLTAGES									
SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q01,02	2SC1571	11.5V	19.9V	11.1V	Q07,08	2SC536	12.2V	19.1V	11.7V
Q03,04	2SC536	11.8V	19.1V	11.4V	Q09,10	2SC536	12.3V	19.1V	11.7V
Q05,06	2SC536	12.1V	19.1V	11.6V	Q11,12	2SC536	12.4V	19.1V	11.8V

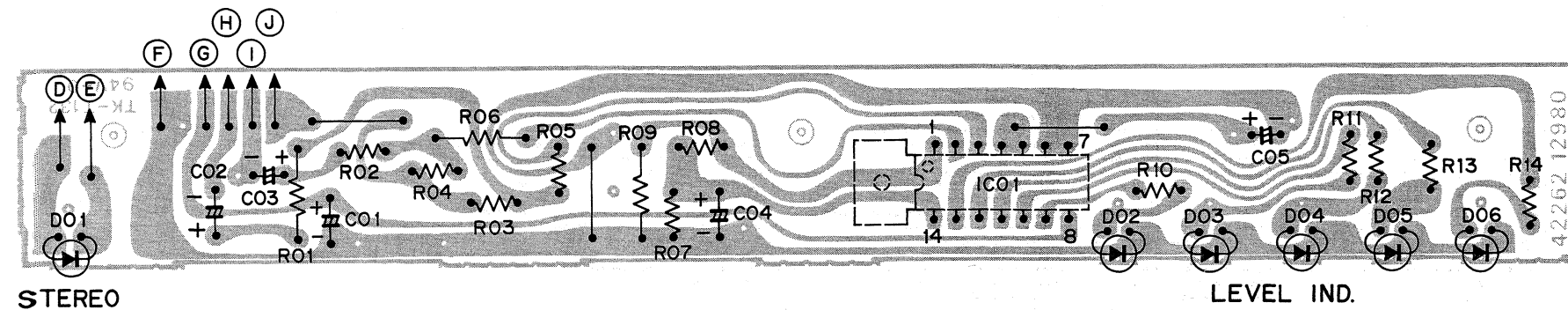
BEAT SWITCH P.C.BOARD (BOTTOM VIEW)



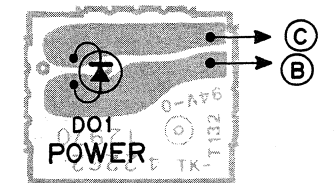
CASSETTE IND. P.C.BOARD (BOTTOM VIEW)



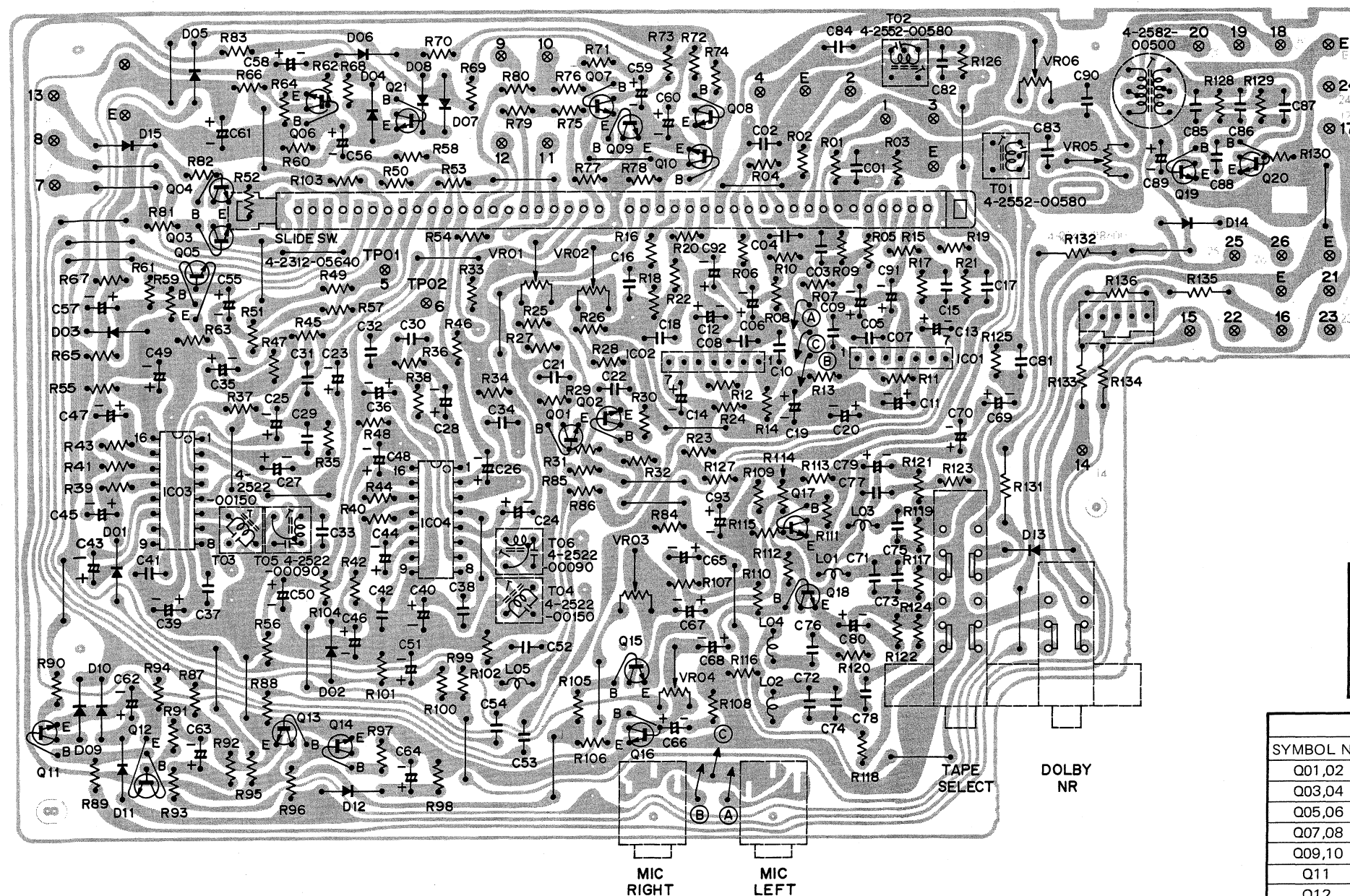
VU METER PRINTED CIRCUIT BOARD (BOTTOM VIEW)



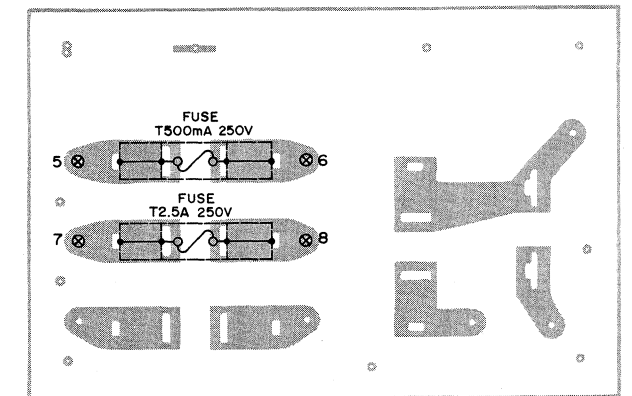
POWER IND. P.C.BOARD (BOTTOM VIEW)



CASSETTE REC/PLAY P.C.BOARD (BOTTOM VIEW)



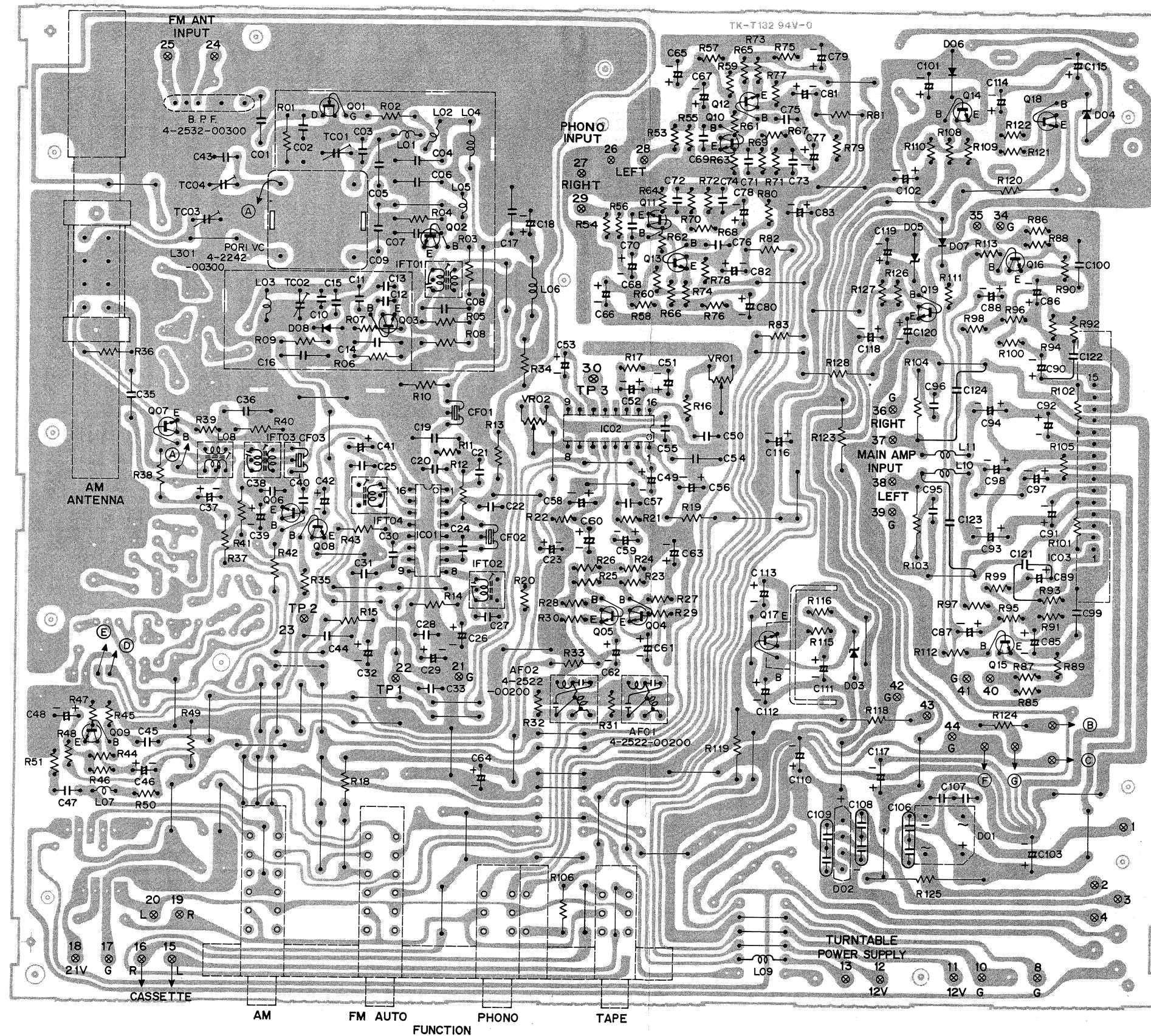
FUSE P.C.BOARD (BOTTOM VIEW)



IC PIN NUMBERS VOLTAGES											
SYMBOL No.	DEVICE	1	2	3	4	5	6	7	8	9	10
IC01,02	BA301	1.7V	0.5V	12mV	0V	0.5V	5.7V	9.7V	—	—	—
IC03,04	LM1112	5.1V	5.2V	5.2V	5.2V	4.7V	5.2V	5.1V	5.3V	0V	5.3V
		11	12	13	14	15	16	—	—	—	—
		5.5V	1.4V	1.5V	1.2V	1.2V	10.6V				

TRANSISTOR DC VOLTAGES									
SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q01,02	2SC536	0.6V	10mV	0V	Q13	2SC536	0.7V	20mV	0V
Q03,04	2SC536	0.6V	11 mV	0V	Q14	2SC536	0.4V	0.7V	0V
Q05,06	2SC536	1.2V	4.8V	0.6V	Q15,16	2SC536	20mV	2mV	0V
Q07,08	2SC536	150mV	12.2V	40mV	Q17,18	2SC1571	2.2V	5.8V	1.6V
Q09,10	2SC536	40mV	3mV	0V	Q19	2SC536	0.4V	9.7V	0.6V
Q11	2SC536	0.7V	30mV	0V	Q20	2SC536	0.5V	9.7V	0.6V
Q12	2SC536	−3.1V	0.7V	0V	Q21	2SC536	20mV	150mV	0V

RF/AF PRINTED CIRCUIT BOARD (BOTTOM VIEW)



IC PIN NUMBERS VOLTAGES																	
SYMBOL No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
IC01	HA-12413	1.8V	1.8V	8.2V	1.8V	0V	1.3V	2.0V	2.0V	2.1V	2.1V	7.6V	0.3V	0V	2.0V	0.3V	0.8V
IC02	LA-3361	8.3V	2.3V	1.6V	2.5V	2.5V	10.7V	0V	0.4V	0.3V	1.3V	1.3V	1.0V	1.4V	1.4V	1.4V	0.8V
IC03	STK-4392	12.4V	12.1V	0V	0V	25.8V	6.2V	50.5V	0V	49.5V	6.2V	28.8V	0V	0V	12.1V	12.4V	—

TRANSISTOR DC VOLTAGES														
SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E	SYMBOL No.	DEVICE	B	C	E
Q01	2SK193	-2mV	8.4V	0V	Q07	2SC929	2.0V	8.5V	1.4V	Q14	2SC536	0.6V	35mV	0V
Q02	2SC2840	4.1V	8.3V	3.5V	Q08	2SC536	0.7V	3mV	0V	Q15,16	2SC536	50mV	3mV	0V
Q03	2SC1675	2.9V	5.2V	2.2V	Q09	2SC536	1.7V	9.8V	1.1V	Q17	2SD330	13.2V	17.1V	12.6V
Q04,05	2SC1571	1.4V	8.9V	0.7V	Q10,11	2SC1571	0.6V	1.3V	50mV	Q18	2SD612	9.1V	16.1V	8.5V
Q06	2SC536	0.6V	7mV	0V	Q12,13	2SC1571	1.3V	11.4V	0.7V	Q19	2SD612	22.3V	36.0V	21.7V

PARTS LIST

RF AF P.C.B. Assy
131 0 4001 11552

Ref. No.	Parts Number	Description
	4 2242 00300	Variable Capacitor
	4 2312 05650	Switch Push 4Key
	4 2532 00300	Band Pass Filter
	4 2579 25291	Bar Antenna MW
AF01,02	4 2522 00200	AF Filter (MPX)
CF01,02	4 2272 00310	Ceramic Filter (10.7 MHz)
CF03	4 2272 00280	Ceramic Filter (455 kHz)
IFT01	4 2562 00550	FM IFT (1st)
IFT02	4 2562 00540	FM IFT Quad. Coil
IFT03	4 2562 00440	AM IFT (1st)
IFT04	4 2562 00530	AM IFT (2nd)
L01	4 2592 00150	RF Coil
L02	4 2592 00140	RF Loading Coil
L03	4 2582 00410	FM OSC Coil
L04	4 2532 00310	Choke Coil (220 μ H)
L05	4 2532 00320	Choke Coil (1.2 μ H)
L06	4 2532 00310	Choke Coil (220 μ H)
L07	4 2532 00340	Choke Coil (39 mH)
L08	4 2582 00590	AM OSC
L09	4 2539 20440	RF Filter (100 mH)
L10,11	4 2532 00421	RF Coil (SP. Output)
TC01~04	4 2242 00200	Trimmer 10 pF
VR01	4 2222 01400	VR 10k-B (Free-Run Adjust)
VR02	4 2222 00990	VR 1k-B (Separation Adjust)

CAPACITORS

C01	C1HCZJ101SPA	Ceramic	100 pF	50V	$\pm 5\%$
C02	C1HCZM1R8SPA	Ceramic	1.8 pF	50V	$\pm 20\%$
C03	C1HCDJ200CH	Ceramic	20 pF	50V	$\pm 5\%$
C04	C1HCZK102BPA	Ceramic	1000 pF	50V	$\pm 10\%$
C05	C1HCZK4R7SPA	Ceramic	4.7 pF	50V	$\pm 10\%$
C06	C1HCZK331BPA	Ceramic	330 pF	50V	$\pm 10\%$
C07	C1HCZN472XPA	Ceramic	0.0047 μ F	50V	$\pm 30\%$
C08	C1CCZN223YPA	Ceramic	0.022 μ F	16V	$\pm 30\%$
C09	C1HCZM010SPA	Ceramic	1.0 pF	50V	$\pm 20\%$
C10	C1HCDJ200CH	Ceramic	20 pF	50V	$\pm 5\%$
C11	C1HCDJ120CH	Ceramic	12 pF	50V	$\pm 5\%$
C12	C1HCDJ150CH	Ceramic	15 pF	50V	$\pm 5\%$
C13	C1HCDD100CH	Ceramic	10 pF	50V	$\pm 0.5\%$
C14	C1CCZN223YPA	Ceramic	0.022 μ F	16V	$\pm 30\%$
C15	C1HCDC030CH	Ceramic	3 pF	50V	$\pm 0.25\%$
C16,17	C1CCZN223YPA	Ceramic	0.022 μ F	16V	$\pm 30\%$
C18	C1ARY-107APA	Electrolytic	100 μ F	10V	
C19	C1CCZN223YPA	Ceramic	0.022 μ F	16V	$\pm 30\%$
C20,21	C1HYYZ223APA	Ceramic	0.022 μ F	50V	+80,-20%
22					
C23	C1CRY-106APA	Electrolytic	10 μ F	16V	
C24,25	C1HYYZ223APA	Ceramic	0.022 μ F	50V	+80,-20%
C26	C0JRY-107APA	Electrolytic	100 μ F	6.3V	
C27,28	C1HYYZ223APA	Ceramic	0.022 μ F	50V	+80,-20%
C29	C1ERY-475APA	Electrolytic	4.7 μ F	25V	
C30	C1HFYK103APA	Mylar	0.01 μ F	50V	$\pm 10\%$
C31	C1HYDZ103A	Ceramic	0.01 μ F	50V	+80,-20%
C32	C1ARY-476APA	Electrolytic	47 μ F	10V	
C33	C1HCYK331APA	Ceramic	330 pF	50V	$\pm 10\%$
C35	C1ECZN103XPA	Ceramic	10000 pF	25V	$\pm 30\%$
C36	C1CCZN223YPA	Ceramic	0.022 μ F	16V	$\pm 30\%$
C37	C1ERY-475APA	Electrolytic	4.7 μ F	25V	
C38	C1HYDZ473A	Ceramic	0.047 μ F	50V	+80,-20%

Ref. No.	Parts Number	Description
	CAPACITORS	
C39	C1ARY-107APA	Electrolytic 100 μ F 10V
C40	C1HYYZ223APA	Ceramic 0.022 μ F 50V +80,-20%
C41	C1HRY-105APA	Electrolytic 1 μ F 50V
C42	C0JRY-336APA	Electrolytic 33 μ F 6.3V
C43	C1HCYC040APA	Ceramic 4 pF 50V $\pm 0.25\%$
C44	C1ECZN103XPA	Ceramic 10000 pF 25V $\pm 30\%$
C45	C1HFYK473APA	Mylar 0.047 μ F 50V $\pm 10\%$
C46	C1HRY-334APA	Electrolytic 0.33 μ F 50V
C47	C1HFYK223APA	Mylar 0.022 μ F 50V $\pm 10\%$
C48	C1CRY-336APA	Electrolytic 33 μ F 16V
C49	C1ERY-475APA	Electrolytic 4.7 μ F 25V
C50	C1HSEJ102A	Styrol 1000 pF 50V $\pm 5\%$
C51,52	C1HRY-474APA	Electrolytic 0.47 μ F 50V
C53	C1ERY-475APA	Electrolytic 4.7 μ F 25V
C54	C1HCZK561BPA	Ceramic 560 pF 50V $\pm 10\%$
C55	C1HFYK473APA	Mylar 0.047 μ F 50V $\pm 10\%$
C56	C1ARY-476APA	Electrolytic 47 μ F 10V
C57,58	C1HFYK153APA	Mylar 0.015 μ F 50V $\pm 10\%$
C59,60	C1HRY-474APA	Electrolytic 0.47 μ F 50V
C61,62	C1ERY-475APA	Electrolytic 4.7 μ F 25V
C63	C1CRY-107APA	Electrolytic 100 μ F 16V
C64	C1ERY-475APA	Electrolytic 4.7 μ F 25V
C65,66	C1ARY-476APA	Electrolytic 47 μ F 10V
C67,68	C1ERY-475LPA	Electrolytic 4.7 μ F 25V
C69,70	C1HCYK101APA	Ceramic 100 pF 50V $\pm 10\%$
C71,72	C1HFYK103APA	Mylar 0.01 μ F 50V $\pm 10\%$
C73,74	C1HFYK332APA	Mylar 0.0033 μ F 50V $\pm 10\%$
C75,76	C1HCYK470APA	Ceramic 47 pF 50V $\pm 10\%$
C77,78	C1CRY-106APA	Electrolytic 10 μ F 16V
C79,80	C0JRY-476APA	Electrolytic 47 μ F 6.3V
C81,82	C1HRY-474APA	Electrolytic 0.47 μ F 50V
C83	C1ERY-107APA	Electrolytic 100 μ F 25V
C85,86	C1HRY-474APA	Electrolytic 0.47 μ F 50V
C87,88	C1VRY-106APA	Electrolytic 10 μ F 35V
C89,90	C1ERY-107APA	Electrolytic 100 μ F 25V
C91,92	C1VRY-476APA	Electrolytic 47 μ F 35V
C93,94	C1VRE-108A	Electrolytic 1000 μ F 35V
C95,96	C1HFYK473APA	Mylar 0.047 μ F 50V $\pm 10\%$
C97	C1JRY-106APA	Electrolytic 10 μ F 63V
C98	C1JRE-107A	Electrolytic 100 μ F 63V
C99,100	C1HCZK471BPA	Ceramic 470 pF 50V $\pm 10\%$
C101	C1HRY-105APA	Electrolytic 1 μ F 50V
C102	C1CRY-106APA	Electrolytic 10 μ F 16V
C103	C1JRK-228A	Electrolytic 2200 μ F 63V
C106~109	4 2232 00430	Ceramic 0.01 μ Fx2 250V
C110	C1ERE-108A	Electrolytic 1000 μ F 25V
C111	C1ERE-227A	Electrolytic 220 μ F 25V
C112	C1CRY-476APA	Electrolytic 47 μ F 16V
C113	C1CRY-107APA	Electrolytic 100 μ F 16V
C114	C1ERY-107APA	Electrolytic 100 μ F 25V
C115	C1CRY-107APA	Electrolytic 100 μ F 16V
C116	C1ARY-107APA	Electrolytic 100 μ F 10V
C117	C1HRE-108A	Electrolytic 1000 μ F 50V
C118	C1VRY-107A	Electrolytic 100 μ F 35V
C119	C1ERY-476APA	Electrolytic 47 μ F 25V
C120	C1HRY-475APA	Electrolytic 4.7 μ F 50V
C121,122	C1HYDK102R	Ceramic 0.001 μ F 50V $\pm 10\%$
C123,124	C1HYDK103R	Ceramic 0.01 μ F 50V $\pm 10\%$

PARTS LIST (Continued)

Ref. No. Parts Number Description

SEMICONDUCTORS

D01	202 5 2560 02015	Diode, DBA-20B
D02	202 5 4610 01010	Diode, DBA-10B
D03	202 5 3210 13012	Zener Diode, GZA13Y
D04	202 5 3210 09112	Zener Diode, GZA9.1Y
D05	202 5 3210 22012	Zener Diode, GZA22Y
D06,07	205 5 9040 44210	Diode, DS-442
D08	DXX-ITT410	Diode, ITT410
IC01	1KK-HA12413	IC, HA12413
IC02	206 5 0483 36112	IC, LA3361B
IC03	205 5 0464 39210	IC, STK-4392 (Power Amp.)
Q01	TNN-2SK193-E	FET 2SK193 E, F
Q02	203 5 4302 84050	TR 2SC2840 E
Q03	TNN-2SC1675-K	TR 2SC1675 K, L
Q04,05	203 5 5251 57170	TR 2SC1571 F, G
Q06	203 5 5000 53660	TR 2SC536 F, G
Q07	203 5 5500 92950	TR 2SC929 E, F
Q08,09	203 5 5000 53660	TR 2SC536 F, G
Q10,11	203 5 5251 57180	TR 2SC1571 G, H
12,13		
Q14,15	203 5 5000 53660	TR 2SC536 F, G
16		
Q17	203 5 8570 33050	TR 2SD330 E, F
Q18,19	203 5 7330 61250	TR 2SD612 E, F

RESISTORS

R01	R2EDZJ184APA	Carbon	180k	1/4W	±5%
R02	R2EDZJ101APA	Carbon	100	1/4W	±5%
R03	R2EDZJ105APA	Carbon	1M	1/4W	±5%
R04	R2EDZJ562APA	Carbon	5.6k	1/4W	±5%
R05	R2EDZJ331APA	Carbon	330	1/4W	±5%
R06	R2EDZJ684APA	Carbon	680k	1/4W	±5%
R07	R2EDZJ562APA	Carbon	5.6k	1/4W	±5%
R08	R2EDZJ822APA	Carbon	8.2k	1/4W	±5%
R09	R2EDZJ124APA	Carbon	120k	1/4W	±5%
R10	R2EDZJ331APA	Carbon	330	1/4W	±5%
R11	R2CDZJ331APB	Carbon	330	1/6W	±5%
R12	R2EDZJ103APA	Carbon	10k	1/4W	±5%
R13	R2EDZJ101APA	Carbon	100	1/4W	±5%
R14	R2EDZJ472APA	Carbon	4.7k	1/4W	±5%
R15	R2EDZJ101APA	Carbon	100	1/4W	±5%
R16	R2CDZJ682APB	Carbon	6.8k	1/6W	±5%
R17	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R18	R2EDZJ102APA	Carbon	1k	1/4W	±5%
R19	R2EDZJ330APA	Carbon	33	1/4W	±5%
R20	R2CDZJ821APB	Carbon	820	1/6W	±5%
R21,22	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R23,24	R2CDZJ153APB	Carbon	15k	1/6W	±5%
R25,26	R2CDZJ154APB	Carbon	150k	1/6W	±5%
R27,28	R2CDZJ332APB	Carbon	3.3k	1/6W	±5%
R29,30	R2CDZJ331APB	Carbon	330	1/6W	±5%
R31,32	R2CDZJ332APB	Carbon	3.3k	1/6W	±5%
R33	R2EDZJ102APA	Carbon	1k	1/4W	±5%
R34	R2EDZJ100APA	Carbon	10	1/4W	±5%
R35	R2CDZJ822APB	Carbon	8.2k	1/6W	±5%
R36	R2EDZJ822APA	Carbon	8.2k	1/4W	±5%
R37	R2EDZJ332APA	Carbon	3.3k	1/4W	±5%
R38	R2EDZJ153APA	Carbon	15k	1/4W	±5%

Ref. No. Parts Number Description

RESISTORS

R39	R2CDZJ101APB	Carbon	100	1/6W	±5%
R40	R2EDZJ222APA	Carbon	2.2k	1/4W	±5%
R41	R2EDZJ101APA	Carbon	100	1/4W	±5%
R42	R2EDZJ822APA	Carbon	8.2k	1/4W	±5%
R43	R2EDZJ222APA	Carbon	2.2k	1/4W	±5%
R44	R2CDZJ124APB	Carbon	120k	1/6W	±5%
R45	R2CDZJ153APB	Carbon	15k	1/6W	±5%
R46	R2CDZJ332APB	Carbon	3.3k	1/6W	±5%
R47	R2CDZJ561APB	Carbon	560	1/6W	±5%
R48	R2CDZJ222APB	Carbon	2.2k	1/6W	±5%
R49	R2EDZJ473APA	Carbon	47k	1/4W	±5%
R50	R2CDZJ471APB	Carbon	470	1/6W	±5%
R51	R2CDZJ220APB	Carbon	22	1/6W	±5%
R53,54	R2CDZJ222APB	Carbon	2.2k	1/6W	±5%
R55,56	R2CDZJ823APB	Carbon	82k	1/6W	±5%
R57,58	R2CDZJ682APB	Carbon	6.8k	1/6W	±5%
R59,60	R2CDZJ103APB	Carbon	10k	1/6W	±5%
R61,62	R2CDZJ473APB	Carbon	47k	1/6W	±5%
R63,64	R2CDZJ391APB	Carbon	390	1/6W	±5%
R65,66	R2CDZJ474APB	Carbon	470k	1/6W	±5%
67,68					
R69,70	R2CDZJ684APB	Carbon	680k	1/6W	±5%
R71,72	R2CDZJ223APB	Carbon	22k	1/6W	±5%
R73,74	R2CDZJ2R2APB	Carbon	2.2	1/6W	±5%
R75,76	R2CDZJ561APB	Carbon	560	1/6W	±5%
R77,78	R2CDZJ682APB	Carbon	6.8k	1/6W	±5%
R79,80	R2CDZJ473APB	Carbon	47k	1/6W	±5%
R81,82	R2EDZJ102APA	Carbon	1k	1/4W	±5%
R83	R2EDBJ101A	Carbon	100	1/4W	±5%
R85,86	R2CDZJ394APB	Carbon	390k	1/6W	±5%
R87,88	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R89,90	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R91,92	R2CDZJ474APB	Carbon	470k	1/6W	±5%
R93,94	R2CDZJ394APB	Carbon	390k	1/6W	±5%
95,96					
R97,98	R2CDZJ224APB	Carbon	220k	1/6W	±5%
R99,100	R2CDZJ181APB	Carbon	180	1/6W	±5%
R101,102	R2EDZJ123APA	Carbon	12k	1/4W	±5%
R103,104	R2HXB4R7A	Oxide Metal Film	4.7	1/2W	±5%
R105	R2HZPK101A	Fuse	100	1/2W	±10%
R106	R2EDZJ220APA	Carbon	22	1/4W	±5%
R108	R2CDZJ223APB	Carbon	22k	1/6W	±5%
R109	R2CDZJ332APB	Carbon	3.3k	1/6W	±5%
R110	R2CDZJ122APB	Carbon	1.2k	1/6W	±5%
R111	R2CDZJ103APB	Carbon	10k	1/6W	±5%
R112,113	R2CDZJ102APB	Carbon	1k	1/6W	±5%
115					
R116	R2CDZJ471APB	Carbon	470	1/6W	±5%
R118	R2HXB5R6A	Oxide Metal Film	5.6	1/2W	±5%
R119	R2HXB6R8A	Oxide Metal Film	6.8	1/2W	±5%
R120	R2EZPK270A	Fuse	27	1/4W	±10%
R121	R2EDZJ392APB	Carbon	3.9k	1/6W	±5%
R122	R2EDZJ122APB	Carbon	1.2k	1/6W	±5%
R123	R2HXB5R6A	Oxide Metal Film	5.6	1/2W	±5%
R124	R2EDZJ821APA	Carbon	820	1/4W	±5%
R125	R2HZPK331A	Fuse	330	1/2W	±10%
R126	R2CDZJ222APB	Carbon	2.2k	1/6W	±5%

PARTS LIST (Continued)

PRE & GRAPHIC EQUALIZER P.C.B. Assy 131 0 4001 11580

Ref. No.	Parts Number	Description
RESISTORS		
R127	R2CDZJ272APB	Carbon 2.7k 1/6W ±5%
R128	R2HXB100A	Oxide Metal Film 10 1/2W ±5%
R129	R2EDPJ224A	Carbon 220k 1/4W ±5%

POWER IND. P.C.B. Assy 131 0 4001 11560

Ref. No.	Parts Number	Description
	131 2 4208 31400	Spacer
SEMICONDUCTOR		
D01	DWW-LN224RP	L.E.D., LN224RP (Red)

VU METER P.C.B. Assy 131 0 4001 11570

Ref. No.	Parts Number	Description
	131 24208 31400	Spacer
CAPACITORS		
C01	C1CRE-106A	Electrolytic 10 µF 16V
C02,03	C1HRE-224A	Electrolytic 0.22 µF 50V
C04	C1CRE-475A	Electrolytic 4.7 µF 16V
C05	CD1 0 6160 0002V	Electrolytic 10 µF 16V

SEMICONDUCTORS

D01,02	DWW-LN224RP	L.E.D., LN224RP (Red)
03,04		
05,06		
IC01	206 5 2341 41610	IC, LB1416

RESISTORS

R01	R2EDZJ101APA	Carbon	100	1/4W	±5%
R02	R2CDZJ101APB	Carbon	100	1/6W	±5%
R03,04	R2CDZJ183APB	Carbon	18k	1/6W	±5%
R05	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R06	R2EDZJ472APA	Carbon	4.7k	1/4W	±5%
R07	R2CDZJ153APB	Carbon	15k	1/6W	±5%
R08	R2CDZJ823APB	Carbon	82k	1/6W	±5%
R09	R2EDZJ103APA	Carbon	10k	1/4W	±5%
R10,11	R2CDZJ151APB	Carbon	150	1/6W	±5%
12,13					
14					

Ref. No.	Parts Number	Description
VR01	4 2222 02810	VR 250k-Gx2
VR02	4 2222 02810	VR 250k-Gx2
VR03	4 2222 02810	VR 250k-Gx2
VR04	4 2222 02810	VR 250k-Gx2
VR05	4 2222 02810	VR 250k-Gx2
VR06	4 2222 02820	VR 200k-Gx1
VR07	4 2222 02800	VR 100k-Bx2

CAPACITORS

C01,02	C1HRY-105APA	Electrolytic	1 µF	50V
C03,04	C1ERY-106APA	Electrolytic	10 µF	25V
C05,06	C1ERY-475APA	Electrolytic	4.7 µF	25V
C07	C1ERE-476A	Electrolytic	47 µF	25V
C08	C1ERY-476APA	Electrolytic	47 µF	25V
C09,10	C1HCYD100APA	Ceramic	10 pF	50V ±0.5%
C11,12	C1ERE-335AL	Electrolytic	3.3 µF	25V
C13,14	C1HFYK183APA	Mylar	0.018 µF	50V ±10%
C15,16	C1HREK334BL	Electrolytic	0.33 µF	50V ±10%
C17,18	C1HFYK822APA	Mylar	0.0082 µF	50V ±10%
C19,20	C1HFRK683A	Mylar	0.068 µF	50V ±10%
C21,22	C1HFYK332APA	Mylar	0.0033 µF	50V ±10%
C23,24	C1HFYK183APA	Mylar	0.018 µF	50V ±10%
C25,26	C1HFRK102A	Mylar	0.001 µF	50V ±10%
C27,28	C1HFYK472APA	Mylar	0.0047 µF	50V ±10%
C29,30	C1HYDK681R	Ceramic	680 pF	50V ±10%
C31,32	C1HRY-474APA	Electrolytic	0.47 µF	50V
C33,34	C1HCYK471APA	Ceramic	470 pF	50V ±10%
C35,36	C1HFRK823A	Mylar	0.082 µF	50V ±10%
C37,38	C1ERY-107APA	Electrolytic	100 µF	25V
C39	C1CRY-107APA	Electrolytic	100 µF	16V

SEMICONDUCTORS

IC01	206 5 3266 45810	IC, LA6458SS
Q01,02	203 5 5251 57170	TR 2SC1571 G, H
Q03,04	203 5 5000 53670	TR 2SC536 G, H
05,06		
07,08		
09,10		
11,12		

RESISTORS

R01,02	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R03,04	R2CDZJ224APB	Carbon	220k	1/6W	±5%
05,06					
R07,08	R2CDZJ562APB	Carbon	5.6k	1/6W	±5%
R09,10	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R11,12	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R13,14	R2CDZJ224APB	Carbon	220k	1/6W	±5%
15,16					
R17,18	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R19,20	R2CDZJ154APB	Carbon	150k	1/6W	±5%
R21,22	R2CDZJ562APB	Carbon	5.6k	1/6W	±5%
R23,24	R2CDZJ391APB	Carbon	390	1/6W	±5%
R25,26	R2CDZJ122APB	Carbon	1.2k	1/6W	±5%
R27,28	R2CDZJ823APB	Carbon	82k	1/6W	±5%
R29,30	R2CDZJ562APB	Carbon	5.6k	1/6W	±5%
R31,32	R2CDZJ391APB	Carbon	390	1/6W	±5%
R33,34	R2CDZJ152APB	Carbon	1.5k	1/6W	±5%

PARTS LIST (Continued)

CASSETTE R/P P.C.B. Assy
131 0 4001 11590

Ref. No.	Parts Number	Description
RESISTORS		
R35,36	R2CDZJ563APB	Carbon 56k 1/6W ±5%
R37,38	R2CDZJ562APB	Carbon 5.6k 1/6W ±5%
R39,40	R2CDZJ391 APB	Carbon 390 1/6W ±5%
R41,42	R2CDZJ152APB	Carbon 1.5k 1/6W ±5%
R43,44	R2CDZJ393APB	Carbon 39k 1/6W ±5%
R45,46	R2CDZJ562APB	Carbon 5.6k 1/6W ±5%
R47,48	R2CDZJ391 APB	Carbon 390 1/6W ±5%
R49,50	R2CDZJ152APB	Carbon 1.5k 1/6W ±5%
R51,52	R2CDZJ273APB	Carbon 27k 1/6W ±5%
R53,54	R2CDZJ562APB	Carbon 5.6k 1/6W ±5%
R55,56	R2CDZJ391 APB	Carbon 390 1/6W ±5%
R57,58	R2CDZJ152APB	Carbon 1.5k 1/6W ±5%
R59,60	R2CDZJ472APB	Carbon 4.7k 1/6W ±5%
R61,62	R2CDZJ682APB	Carbon 6.8k 1/6W ±5%
R63	R2CDZJ101 APB	Carbon 100 1/6W ±5%
R64	R2CDZJ470APB	Carbon 47 1/6W ±5%
R65	R2CDZJ682APB	Carbon 6.8k 1/6W ±5%
R66	R2CDZJ123APB	Carbon 12k 1/6W ±5%

Ref. No.	Parts Number	Description
	4 2312 05630	Switch Push 2Key
	4 2312 05640	Switch Slide 14
	4 2352 01160	Jack 3P
	4 2362 00450	Plug 5P
	4 2582 00500	OSC Coil
	4 2552 00200	Coil (8.2 mH)
L01,02		
03,04		
05		
T01,02	4 2552 00580	AF Coil (Bias Trap)
T03,04	4 2522 00150	AF Filter (DOLBY 47 kHz)
T05,06	4 2522 00090	AF Filter (DOLBY 19 kHz)
VR01	4 2222 01010	VR 50k-B
VR02	4 2222 01010	VR 50k-B
VR03	4 2222 01040	VR 20k-B
VR04	4 2222 01040	VR 20k-B
VR05	4 2222 01020	VR 200k-B
VR06	4 2222 01020	VR 200k-B

CAPACITORS

C01,02	C1HYYK821RPA	Ceramic 820 pF 50V ±10%
C03	C1HYDZ103A	Ceramic 0.01 µF 50V +80,-20%
C04	C1HYYZ103APA	Ceramic 0.01 µF 50V +80,-20%
C05,06	C1CRY-106LPA	Electrolytic 10 µF 16V
C07,08	C1HCDK101SL	Ceramic 100 pF 50V ±10%
C09,10	C1HCYK330APA	Ceramic 33 pF 50V ±10%
C11	C1ARY-226APA	Electrolytic 22 µF 10V
C12	C1ARE-226A	Electrolytic 22 µF 10V
C13,14	C1CRY-226APA	Electrolytic 22 µF 16V
C15,16	C1HFRJ822A	Mylar 0.0082 µF 50V ±5%
C17,18	C1HCYK331APA	Ceramic 330 pF 50V ±10%
C19	C1CRY-226APA	Electrolytic 22 µF 16V
C20	C1CRY-107APA	Electrolytic 100 µF 16V
C21,22	C1HFYK153APA	Mylar 0.015 µF 50V ±10%
C23,24	C1HRY-105APA	Electrolytic 1 µF 50V
C25,26	C1CRY-106APA	Electrolytic 10 µF 16V
27,28		
C29,30	C1HFRJ472A	Mylar 0.0047 µF 50V ±5%
C31,32	C1HFRJ333A	Mylar 0.033 µF 50V ±5%
C33,34	C1HFYK472APA	Mylar 0.0047 µF 50V ±10%
C35,36	C1CRY-106APA	Electrolytic 10 µF 16V
C37,38	C1HFYK102APA	Mylar 0.001 µF 50V ±10%
C39,40	C1ARE-227A	Electrolytic 220 µF 10V
C41,42	C1HFYK473APA	Mylar 0.047 µF 50V ±10%
C43,44	C1CRY-106APA	Electrolytic 10 µF 16V
C45,46	C1CUX104APA	Sint. Alu. 0.1 µF 16V +40,-20%
C47,48	C1CUX334APA	Sint. Alu. 0.33 µF 16V +40,-20%
C49,50	C1CRE-227A	Electrolytic 220 µF 16V
C51	C1ERY-475APA	Electrolytic 4.7 µF 25V
C52	C1HFYK152APA	Mylar 0.0015 µF 50V ±10%
C53,54	C1HFYK473APA	Mylar 0.047 µF 50V ±10%
C55,56	C1HRY-105APA	Electrolytic 1 µF 50V
57,58		
C59,60	C1HRY-225LPA	Electrolytic 2.2 µF 50V
C61	C1CRE-227A	Electrolytic 220 µF 16V
C62,63	C1ERY-475APA	Electrolytic 4.7 µF 25V
C64	C1HRY-225APA	Electrolytic 2.2 µF 50V
C65,66	C1CUX224APA	Sint. Alu. 0.22 µF 16V +40,-20%
C67,68	C1ERY-475APA	Electrolytic 4.7 µF 25V
C69,70	C1CRY-106APA	Electrolytic 10 µF 16V

PARTS LIST (Continued)

Ref. No.	Parts Number	Description
CAPACITORS		
C71,72	C1HFRJ822A	Mylar 0.0082 μF 50V ±5%
C73,74	C1HFKYK102APA	Mylar 0.001 μF 50V ±10%
C75,76	C1HFRJ123A	Mylar 0.012 μF 50V ±5%
C77,78	C1HFKYK183APA	Mylar 0.018 μF 50V ±10%
C79	C1ARE-336A	Electrolytic 33 μF 10V
C80	C1ARY-336APA	Electrolytic 33 μF 10V
C81,82	C1HFKYK102APA	Mylar 0.001 μF 50V ±10%
C83,84	C1HCYK221APA	Ceramic 220 pF 50V ±10%
C85	C1HFKYK333APA	Mylar 0.033 μF 50V ±10%
C86,87	C1HFKYK472APA	Mylar 0.0047 μF 50V ±10%
C88	C1HFKYK103APA	Mylar 0.01 μF 50V ±10%
C89	C1CRY-106APA	Electrolytic 10 μF 16V
C90	C2ANRJ472N	Polypropylene 4700 pF 100V ±5%
C91,92	C1ARY-336APA	Electrolytic 33 μF 10V
C93	C1CRY-107APA	Electrolytic 100 μF 16V

SEMICONDUCTORS		
D01,02	205 5 9040 44210	Diode, DS-442
03,04		
05,06		
07,08		
09,10		
11,12		
D13,14	202 5 2470 13540	Diode, DS135D
D15	205 5 9040 44210	Diode, DS-442
IC01,02	IYY-BA301	IC, BA301
IC03,04	IUU-LM1112	IC, LM1112AN (DOLBY)
Q01,02	203 5 5000 53660	TR 2SC536 F, G
03,04		
05,06		
07,08		
09,10		
11,12		
13,14		
15,16		
Q17,18	203 5 5251 57170	TR 2SC1571 G, H
Q19,20	203 5 5000 53660	TR 2SC536 F, G
21		

RESISTORS					
R01,02	R2CDZJ100APB	Carbon	10	1/6W	±5%
R03,04	R2CDZJ104APB	Carbon	100k	1/6W	±5%
R05,06	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R07,08	R2CDZJ471APB	Carbon	470	1/6W	±5%
R09,10	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R11,12	R2CDZJ154APB	Carbon	150k	1/6W	±5%
R13,14	R2CDZJ184APB	Carbon	180k	1/6W	±5%
R15,16	R2CDZJ123APB	Carbon	12k	1/6W	±5%
R17,18	R2CDZJ394APB	Carbon	390k	1/6W	±5%
R19,20	R2CDZJ332APB	Carbon	3.3k	1/6W	±5%
R21,22	R2CDZJ393APB	Carbon	39k	1/6W	±5%
R23	R2CDZJ102APB	Carbon	1k	1/6W	±5%
R24	R2CDZJ472APB	Carbon	4.7k	1/6W	±5%
R25,26	R2CDZJ272APB	Carbon	2.7k	1/6W	±5%
R27,28	R2CDZJ392APB	Carbon	3.9k	1/6W	±5%
R29,30	R2CDZJ224APB	Carbon	220k	1/6W	±5%
R31,32	R2CDZJ103APB	Carbon	10k	1/6W	±5%

Ref. No.	Parts Number	Description
RESISTORS		
R33,34	R2CDZJ104APB	Carbon 100k 1/6W ±5%
R35,36	R2CDZJ473APB	Carbon 47k 1/6W ±5%
R37,38	R2CDZJ332APB	Carbon 3.3k 1/6W ±5%
R39,40	R2CDZJ154APB	Carbon 150k 1/6W ±5%
R41,42	R2CDZJ334APB	Carbon 330k 1/6W ±5%
R43,44	R2CDZJ274APB	Carbon 270k 1/6W ±5%
R45,46	R2CDZJ104APB	Carbon 100k 1/6W ±5%
47,48		
R49,50	R2CDZJ472APB	Carbon 4.7k 1/6W ±5%
R51,52	R2CDZJ153APB	Carbon 15k 1/6W ±5%
R53,54	R2CDZJ473APB	Carbon 47k 1/6W ±5%
R55,56	R2CDZJ121APB	Carbon 120 1/6W ±5%
R57,58	R2CDZJ683APB	Carbon 68k 1/6W ±5%
R59,60	R2CDZJ563APB	Carbon 56k 1/6W ±5%
R61,62	R2CDZJ124APB	Carbon 120k 1/6W ±5%
R63,64	R2CDZJ271APB	Carbon 270 1/6W ±5%
R65,66	R2CDZJ332APB	Carbon 3.3k 1/6W ±5%
R67,68	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R69,70	R2CDZJ100APB	Carbon 10 1/6W ±5%
R71,72	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R73,74	R2CDZJ101APB	Carbon 100 1/6W ±5%
R75,76	R2CDZJ823APB	Carbon 82k 1/6W ±5%
R77,78	R2CDZJ123APB	Carbon 12k 1/6W ±5%
R79,80	R2CDZJ273APB	Carbon 27k 1/6W ±5%
R81,82	R2CDZJ153APB	Carbon 15k 1/6W ±5%
R83	R2CDZJ223APB	Carbon 22k 1/6W ±5%
R84	R2CDZJ123APB	Carbon 12k 1/6W ±5%
R85,86	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R87,88	R2CDZJ104APB	Carbon 100k 1/6W ±5%
R89	R2CDZJ153APB	Carbon 15k 1/6W ±5%
R90	R2CDZJ472APB	Carbon 4.7k 1/6W ±5%
R91	R2CDZJ473APB	Carbon 47k 1/6W ±5%
R92	R2CDZJ123APB	Carbon 12k 1/6W ±5%
R93	R2CDZJ471APB	Carbon 470 1/6W ±5%
R94	R2CDZJ104APB	Carbon 100k 1/6W ±5%
R95	R2CDZJ332APB	Carbon 3.3k 1/6W ±5%
R96	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R97	R2CDZJ473APB	Carbon 47k 1/6W ±5%
R98	R2CDZJ223APB	Carbon 22k 1/6W ±5%
R99	R2CDZJ123APB	Carbon 12k 1/6W ±5%
R100,101	R2CDZJ563APB	Carbon 56k 1/6W ±5%
R102	R2CDZJ470APB	Carbon 47 1/6W ±5%
R103,104	R2CDZJ222APB	Carbon 2.2k 1/6W ±5%
R105,106	R2CDZJ153APB	Carbon 15k 1/6W ±5%
107,108		
R109,110	R2CDZJ334APB	Carbon 330k 1/6W ±5%
R111,112	R2CDZJ474APB	Carbon 470k 1/6W ±5%
R113,114	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R115,116	R2CDZJ272APB	Carbon 2.7k 1/6W ±5%
R117,118	R2CDZJ820APB	Carbon 82 1/6W ±5%
R119,120	R2CDZJ221APB	Carbon 220 1/6W ±5%
R121,122	R2CDZJ392APB	Carbon 3.9k 1/6W ±5%
123,124		
R125,126	R2CDZJ103APB	Carbon 10k 1/6W ±5%
R127	R2CDZJ331APB	Carbon 330 1/6W ±5%
R128,129	R2CDZJ333APB	Carbon 33k 1/6W ±5%
R130	R2CDZJ8R2APB	Carbon 8.2 1/6W ±5%
R131	R2HZPK221A	Fuse 220 1/2W ±10%

PARTS LIST (Continued)

SPEAKER SELECT P.C.B. Assy
131 0 4001 11620

Ref. No.	Parts Number	Description
RESISTORS		
R132	R2HZPK270A	Fuse 27 1/2W ±10%
R133	R2EDZJ152APA	Carbon 1.5k 1/4W ±5%
R134,135	R2EDZJ681APA	Carbon 680 1/4W ±5%
R136	R2EDZJ152APA	Carbon 1.5k 1/4W ±5%

CASSETTE IND. P.C.B. Assy
131 0 4001 11600

Ref. No.	Parts Number	Description
	131 0 4006 33602	Cord Assy
	131 2 4208 31400	Spacer

SEMICONDUCTORS		
D01	DWW-LN224RP	L.E.D., LN224RP (Red)
D02	DWW-LN324GP	L.E.D., LN324GP (Green)
D03	DWW-LN424YP	L.E.D., LN424YP (Yellow)
D04	DWW-LN224RP	L.E.D., LN224RP (Red)

BEAT SWITCH P.C.B. Assy
131 0 4001 11610

Ref. No.	Parts Number	Description
	4 2312 01700	Switch Slide
CAPACITOR		
C01	C2ANRJ471N	Polypropylene 470 pF 100V ±5%

Ref. No.	Parts Number	Description
	4 2312 02710	Switch Push 1Key
	4 2352 01530	Jack 7P

RESISTORS		
R01,02	R2HXB331A	Oxide Metal Film 330 1/2W ±5%
R03,04	R2EDZJ681APA	Carbon 680 1/4W ±5%

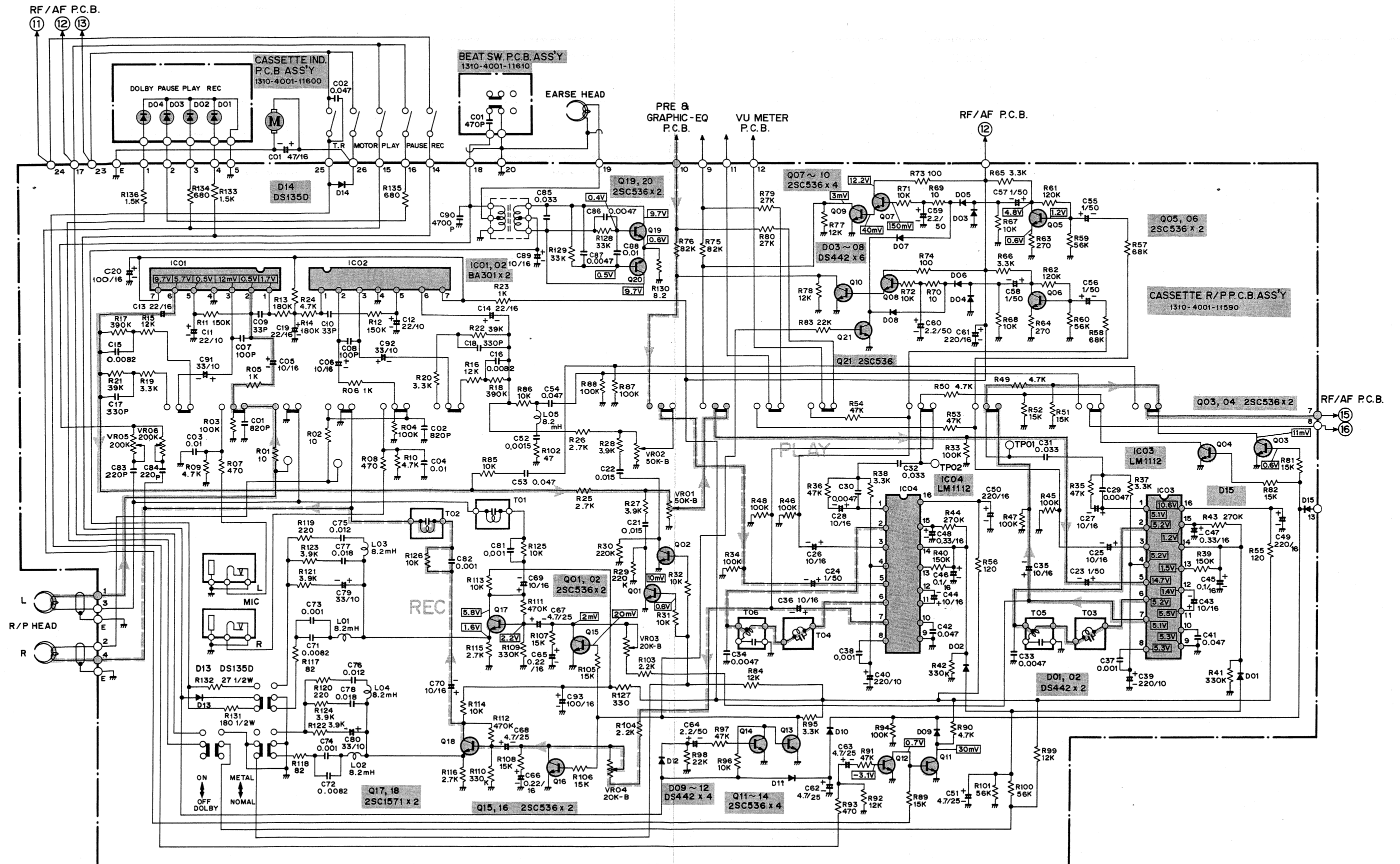
FUSE P.C.B. Assy
131 0 4001 08553

Ref. No.	Parts Number	Description
⚠	4 2349 20310	Fuse T 500 mA
⚠	4 2349 20570	Fuse T 2.5 A
	4 2352 00200	Fuse Clip

PRODUCT SAFETY NOTICE

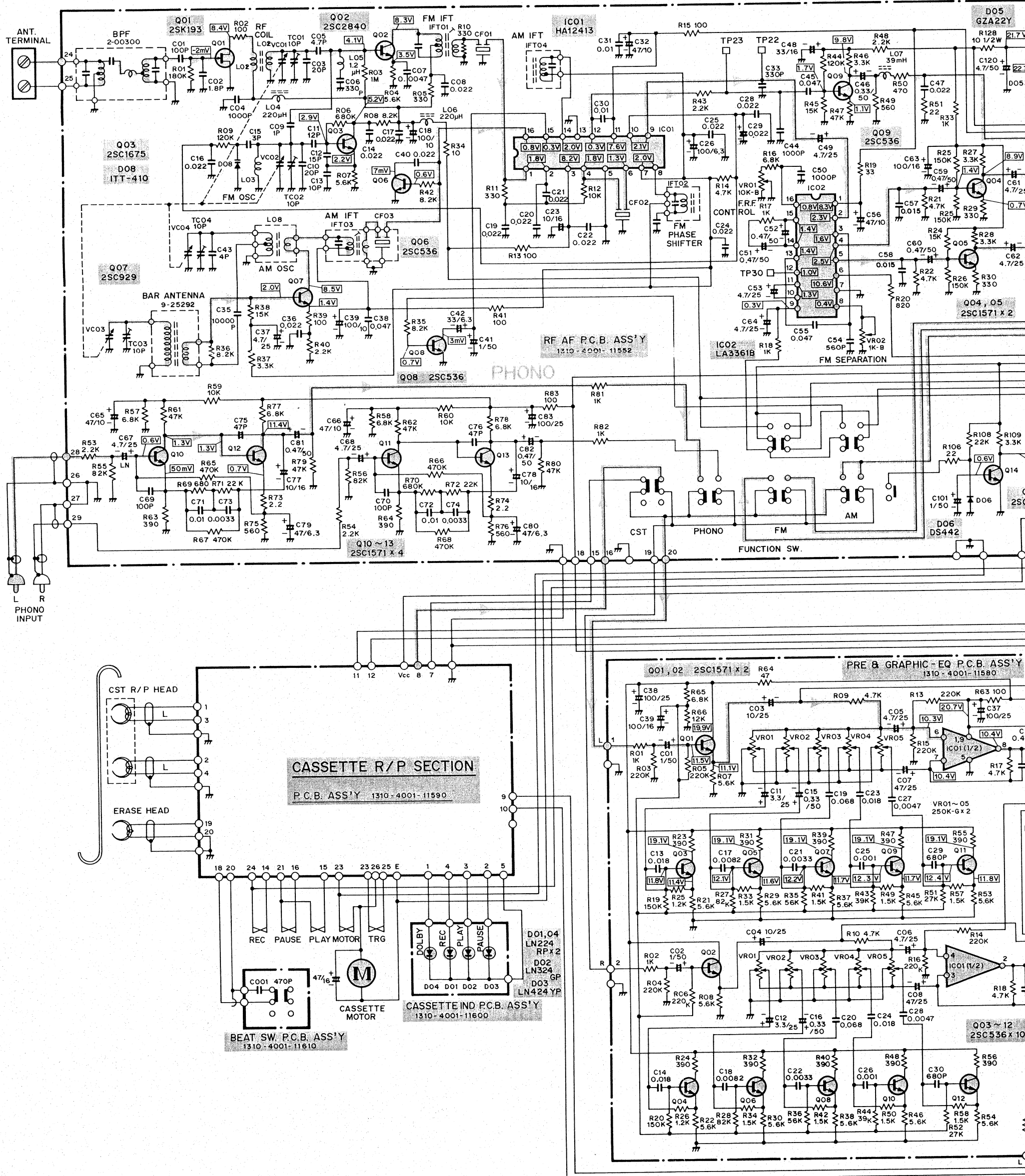
PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF AN UNIT. COMPONENTS INDICATED BY A MARK ⚠ IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAS SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

SCHEMATIC DIAGRAM (1) (CASSETTE SECTION)



Because Fisher products are subject to continuous improvement, Fisher Corporation reserves the right to make any changes or modifications without notice.

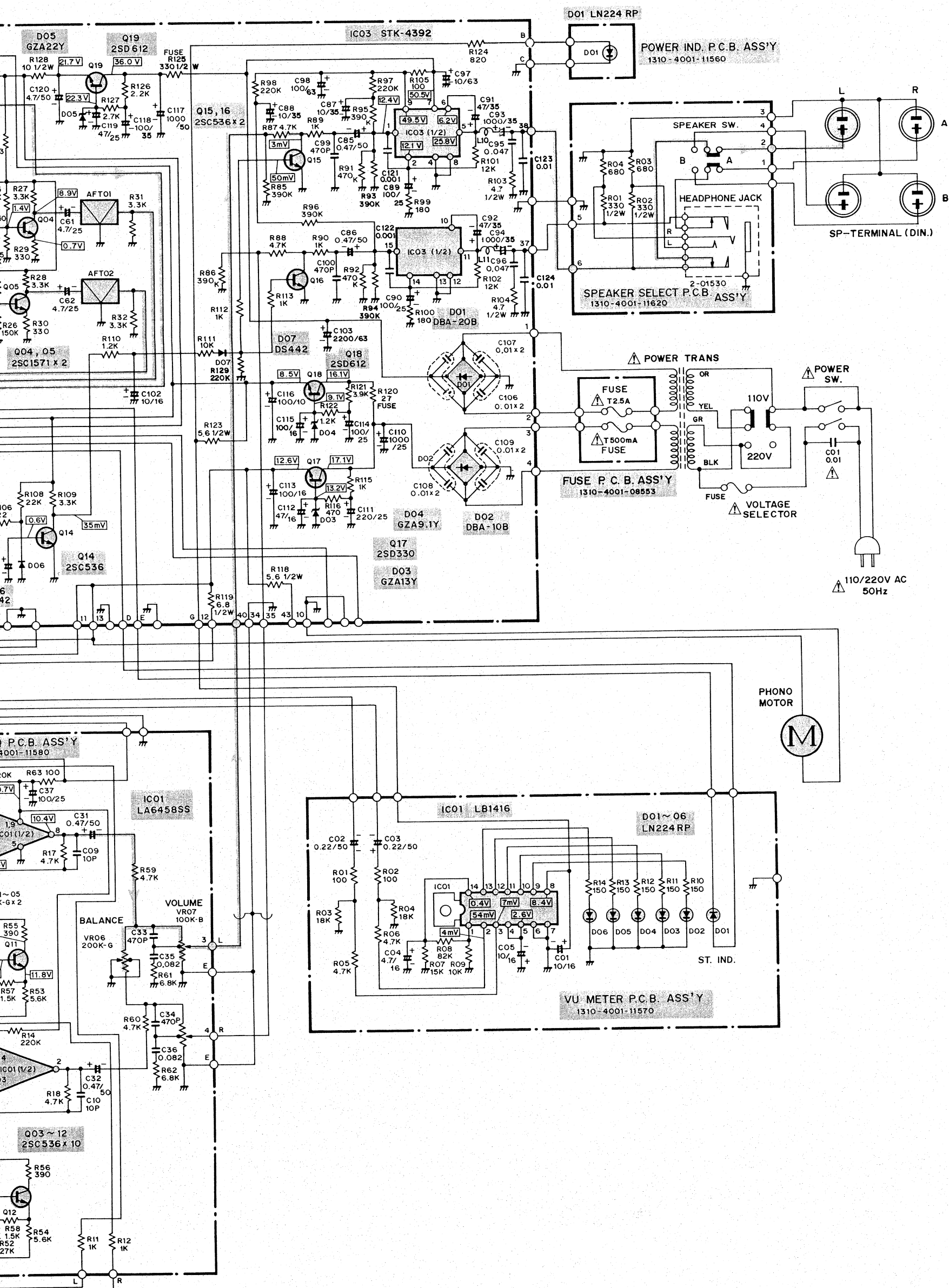
MC-720 SCHEMATIC DIA



PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF AN UNIT. COMPONENTS INDICATED BY A MARK Δ IN THIS SCHEMATIC DIAGRAM SHOW COMPONENTS WHOSE VALUE HAS SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS SPECIFIED ON THE ATTACHED PARTS LIST BE USED FOR COMPONENT REPLACEMENT POINTED OUT BY THE MARK.

C DIAGRAM (2)

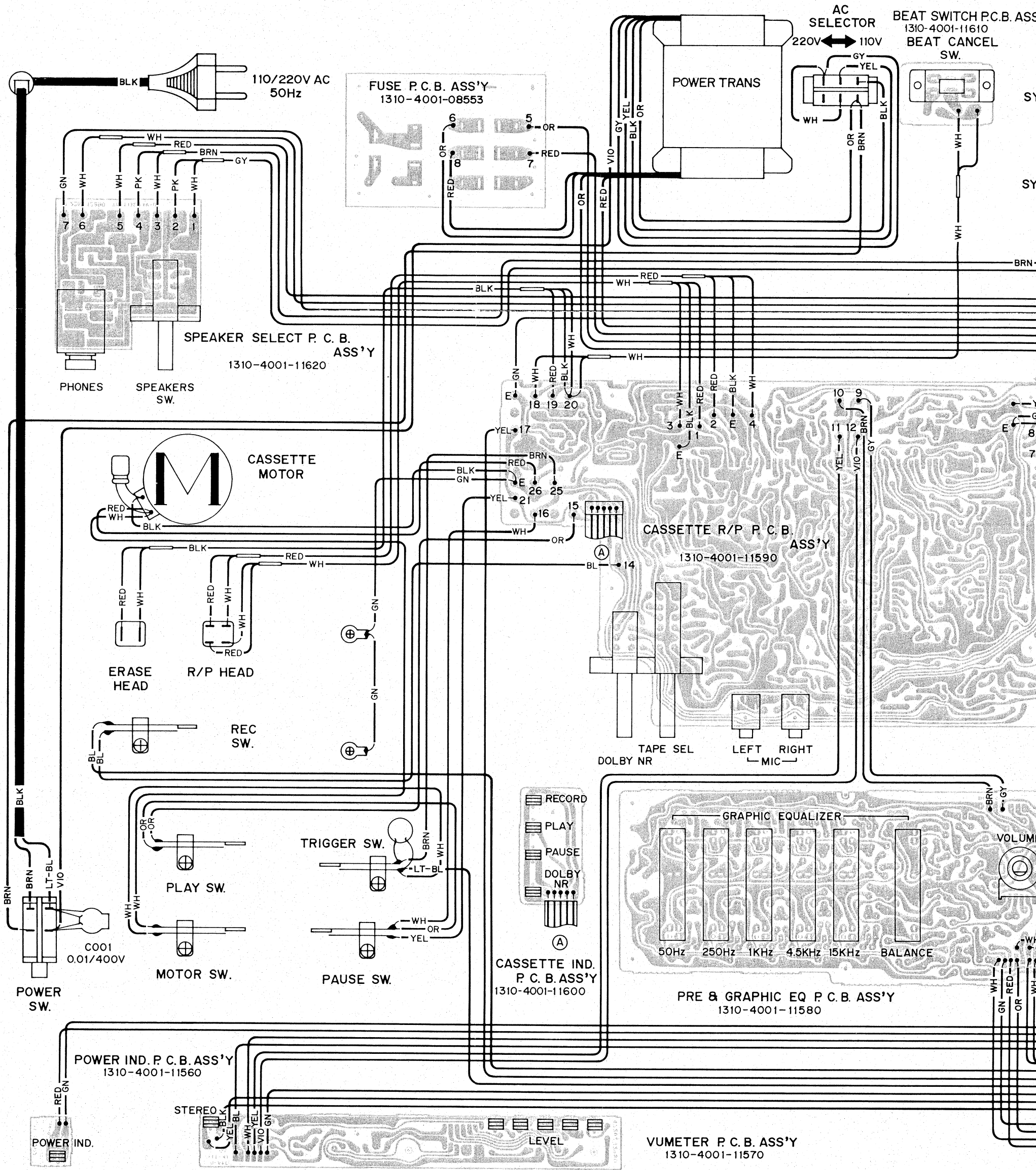


NOTES:

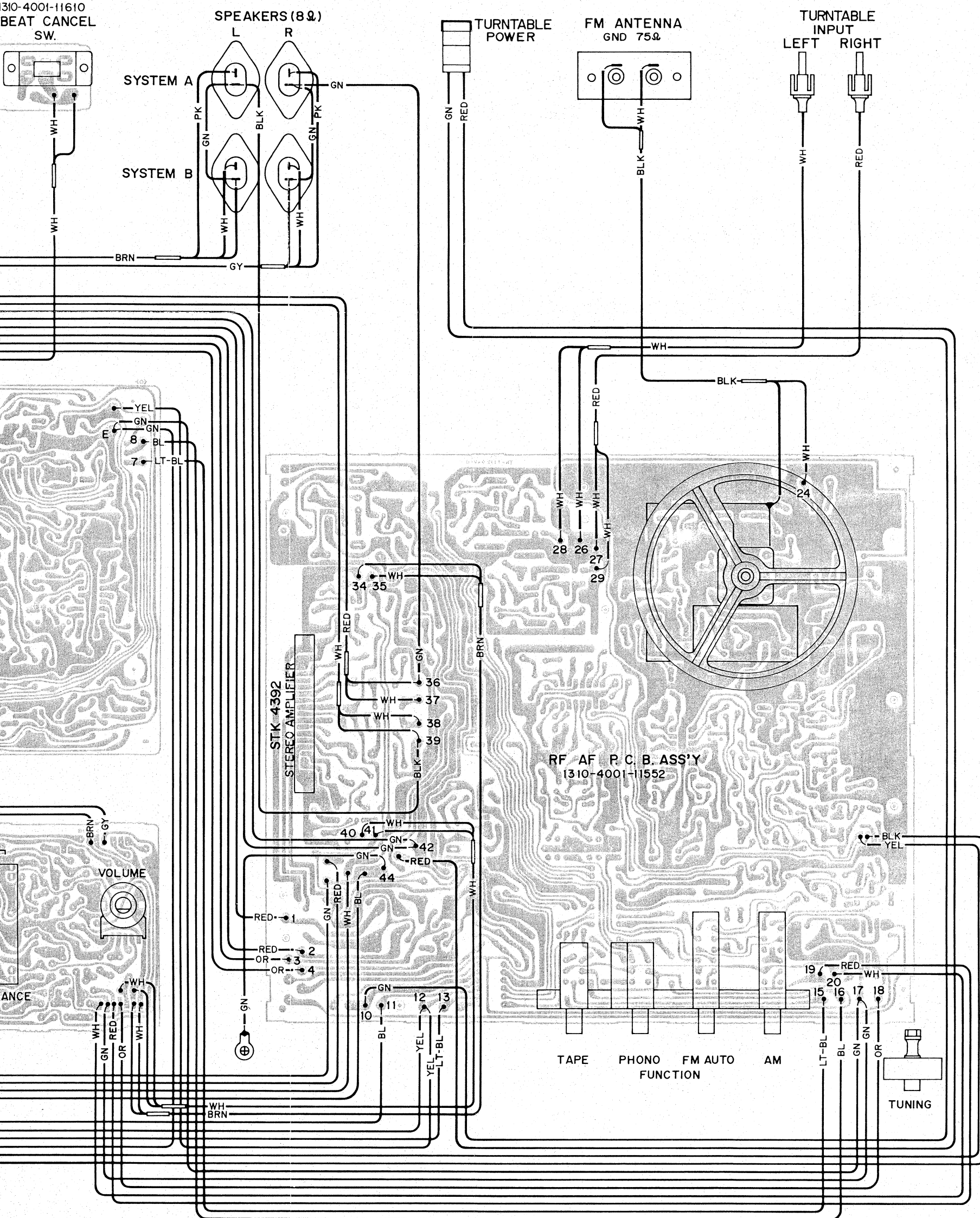
1. All resistors values are indicated in "ohm" ($K=10^3$, $M=10^6$).
2. All capacitors values are indicated in " μF " ($P=10^{-12}$).
3. All voltages indicated on the schematics are measured under the following conditions.
 - a. Use a V.T.V.M.
4. This is a basic schematic diagram.

Because Fisher products are subject to continuous improvement, Fisher Corporation reserves the right to make any changes or modifications without notice.

POINT TO POINT WIRING



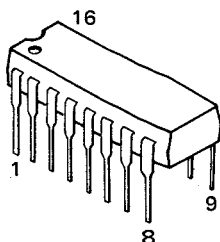
BEAT SWITCH P.C.B. ASS'Y
310-4001-11610
BEAT CANCEL
SW.



SEMICONDUCTOR LEAD IDENTIFICATION

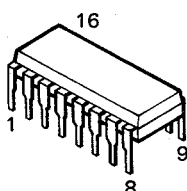
INTEGRATED CIRCUITS

AM/FM IF AMP &
MPX P.L.L. IC



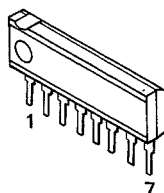
- HA12413
- LA3361

DOLBY NR IC



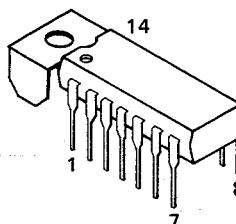
- LM1112

REC/PLAY
AMPLIFIER IC



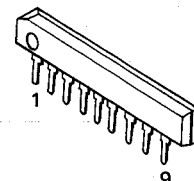
- BA301

L.E.D. METER
DRIVE IC



- LB1416

PRE AMP IC



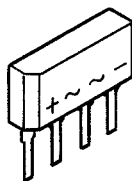
- LA6458

DIODES

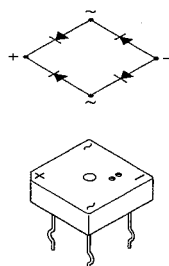
Cathode

- DS-135
- DS-442
- GZA9.1
- GZA13
- GZA22

Anode

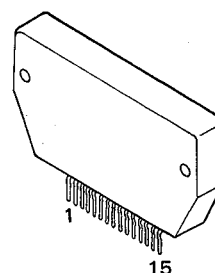


- DBA10B



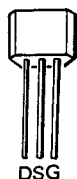
- DBA20B

POWER AMP IC

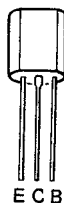


- STK-4392

BI-POLAR TRANSISTORS

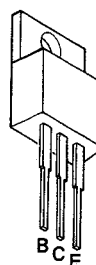


- 2SK212
- 2SK193



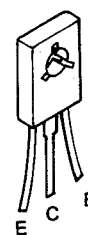
E C B

- 2SC536
- 2SC929
- 2SC930
- 2SC1571
- 2SC1675
- 2SC2840



B C E

- 2SD330



E C B

- 2SD612